

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION



PROJECT NAME: LOWER LAKE COUNTY WATERWORKS NEW WELL, STORAGE TANK AND BOOSTER PUMP

Date of Preparation: April 5, 2024

Lead Agency: Lower Lake County Waterworks District No. 1

Project Description: The project would provide a new municipal water well to provide water to the Lake County Waterworks District No. 1 in the short term as Phase I. The project also includes environmental review of Phase II that includes an approximately 100,000 gallon water storage tank and booster pump station on the same site, to be implemented when funding is available.

Project Location: Existing water treatment plant 9336 Quarterhorse Drive (APN 049-011-05)/9317 Riverview Drive (APN 049-011-06) and vacant parcel 9310 Riverview Drive (APN 049-021-22), Lower Lake, Lake County, CA

Findings: Based on the Initial Study dated April 5, 2024, the Lower Lake County Waterworks District has determined that:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
3. This project will not have impacts that are cumulatively considerable.
4. This project will not have environmental impacts that will cause substantial adverse effects on human beings, either directly or indirectly.

Public Review Period: April 5, 2024, through May 6, 2024

Public Review: The Initial Study is available (beginning April 5, 2024) for public review at the Lower Lake County Waterworks District, 16254 Main Street, Lower Lake. The Initial Study can also be viewed at <https://llcwd.com/>. All documents referenced in the Initial Study are available at the office of Brelje & Race, 475 Aviation Blvd., Suite 120, Santa Rosa. The public is invited to submit written comments regarding the environmental findings and the proposed Mitigated Negative Declaration determination to: Lower Lake County Waterworks District No. 1, PO Box 263, Lower Lake, CA 95457 for receipt by 5:00 pm, Monday, May 6, 2024. Persons commenting are advised to raise all pertinent issues during the public comment period. If action taken by the Lower Lake County Waterworks District No. 1 is challenged in court, the legal challenge may be limited to those issues raised by persons during the public comment period.

Where to Submit Comments: Lower Lake County Waterworks District No. 1
PO Box 263
Lower Lake, CA 95457

Contact Person: James Kingland, General Manager
(707) 994-6009
james.kingland@llcwd.com

The Mitigated Negative Declaration has been prepared in compliance with the provisions of the California Environmental Quality Act.

MITIGATED NEGATIVE DECLARATION

Project Title: Lower Lake County Waterworks New Well, Storage Tank and Booster Pump

Date of Preparation: April 5, 2024

Lead Agency: Lower Lake County Waterworks District No. 1



Project Description: The project would provide a new municipal water well to provide water to the Lake County Waterworks District No. 1 (District) in the short term as Phase I. The project also includes environmental review of Phase II that includes an approximately 100,000 gallon water storage tank and booster pump station on the same site, to be implemented when funding is available.

Project Location: Existing water treatment plant 9336 Quarterhorse Drive (APN 049-011-05)/9317 Riverview Drive (APN 049-011-06) and vacant parcel 9310 Riverview Drive (APN 049-021-22), Lower Lake, Lake County, CA

General Plan: LDR

Zoning: R1-MH-B3

Findings:

1. With the incorporation of mitigation measures, this project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
3. This project will not have impacts that are cumulatively considerable.
4. This project will not have environmental impacts that will cause substantial adverse effects on human beings, either directly or indirectly.
 - o The proposed project could not have a significant effect on the environment and a Negative Declaration will be prepared.
 - Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A Mitigated Negative Declaration will be prepared.

Public Review Period: April 5, 2024, through May 6, 2024

Mitigation Measures: See Initial Study

Where to Submit Comments: Lower Lake County Waterworks District No. 1
PO Box 263
Lower Lake, CA 95457

Contact Person: James Kingland, General Manager
(707) 994-6009
james.kingland@llc wd.com

Attachment: Initial Study

**LOWER LAKE COUNTY WATERWORKS NEW WELL, STORAGE TANK AND BOOSTER
PUMP PROJECT**

Lower Lake, California

Initial Study

April 2024

Prepared for:

Lower Lake County Waterworks District No. 1
16254 Main Street
Lower Lake, CA 95457

Prepared by:

Brelje & Race Engineers
475 Aviation Blvd., Suite 120
Santa Rosa CA 95403
707/576-1322

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Appendix A: Mitigation Monitoring & Reporting Plan

PROJECT DATA

Project Title: LLCWD New Well, Storage Tank and Booster Pump

Lead Agency: Lower Lake County Waterworks District No. 1
PO Box 263
Lower Lake, CA 95457

Contact Person: James Kingland, General Manager
(707) 994-6009
james.kingland@llcwd.com

Project Location: Existing water treatment plant 9336 Quarterhorse Drive (APN 049-011-05)/9317 Riverview Drive (APN 049-011-06) and vacant parcel 9310 Riverview Drive (APN 049-021-22), Lower Lake, Lake County, CA

General Plan Designation: LDR

Zoning: R1-MH-B3

INTRODUCTION

The purpose of this Initial Study is to provide the Lead Agency, the Lower Lake County Waterworks District No. 1 (District), with an assessment of relevant environmental information associated with implementation of the proposed project in order to determine whether a Negative Declaration, Mitigated Negative Declaration or an Environmental Impact Report (EIR) will be required for the District's New Well, Storage Tank and Booster Pump Project. This environmental evaluation is intended to fully inform the Lead Agency, other interested agencies and the public of the proposed plan and associated environmental impacts. This Initial Study has been prepared in conformance with the requirements of §15063 of the 2019 California Environmental Quality Act (CEQA) Guidelines.

If the Lead Agency determines that there is no substantial evidence that the project may have a significant effect on the environment, then a Negative Declaration may be prepared. A Negative Declaration may include conditions of approval to avoid or reduce potential impacts. However, if the Initial Study determines that the project may cause an unavoidable or unknown significant effect on the environment, the Lead Agency must prepare an EIR.

The Initial Study process also enables the Lead Agency to modify a project, mitigating adverse effects before an EIR is prepared, thereby enabling the project to move forward under a Mitigated Negative Declaration. This facilitates the environmental evaluation portion of the project development process and eliminates unnecessary EIRs.

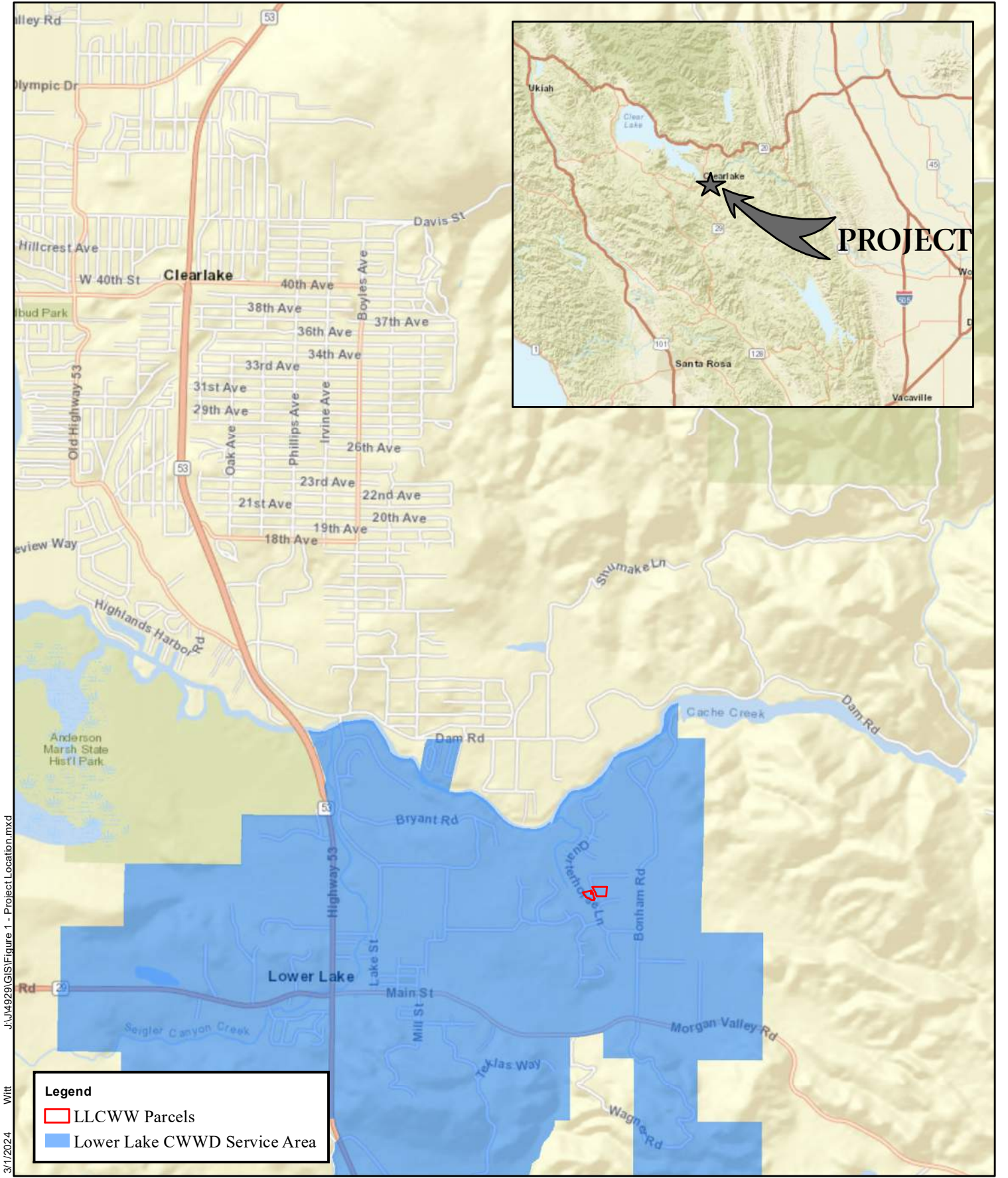
PROJECT SETTING

The project area is generally developed with low density residential uses surrounding the proposed project location. The District owns and operates an existing water treatment facility located on two adjoining parcels, 9336 Quarterhorse Lane (APN 049-011-05) and 9317 Riverview Drive (APN 049-011-06). In addition to the water treatment facility, the site also includes one of the District's existing wells (Well No. 1 currently in use) and a small stockyard. The site is maintained by the District for all-weather access.

The District also owns a vacant parcel just to the east, across Riverview Drive, 9310 Riverview Drive (APN 049-021-22) that is the proposed location of the new well and eventual water storage tank and booster pump station. The site had a house on it that burned down prior to the District purchasing it. The site does not have any structures and is mowed by the District. There is an existing well and abandoned septic system on the property that would be abandoned as part of the project. The proposed project's regional location and project overview is shown on Figures 1 and 2.

PROJECT OBJECTIVES/PURPOSE AND NEED

The District has received a grant from the State Department of Water Resources through the Small Community Drought Relief Program to implement an emergency municipal drinking water well to support the District's water system. The proposed emergency well would allow the District redundant production capacity and better handle water restrictions during periods of drought and improve overall system resiliency. The District also plans to place a booster pump and an approximately 100,000-gallon water storage tank at the site in the future as Phase II.



J:\4929\GIS\Figure 1 - Project Location.mxd
Witt
3/1/2024

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

DATA SOURCES
 Parcels: County of Lake
 Streets: County of Lake

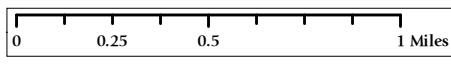
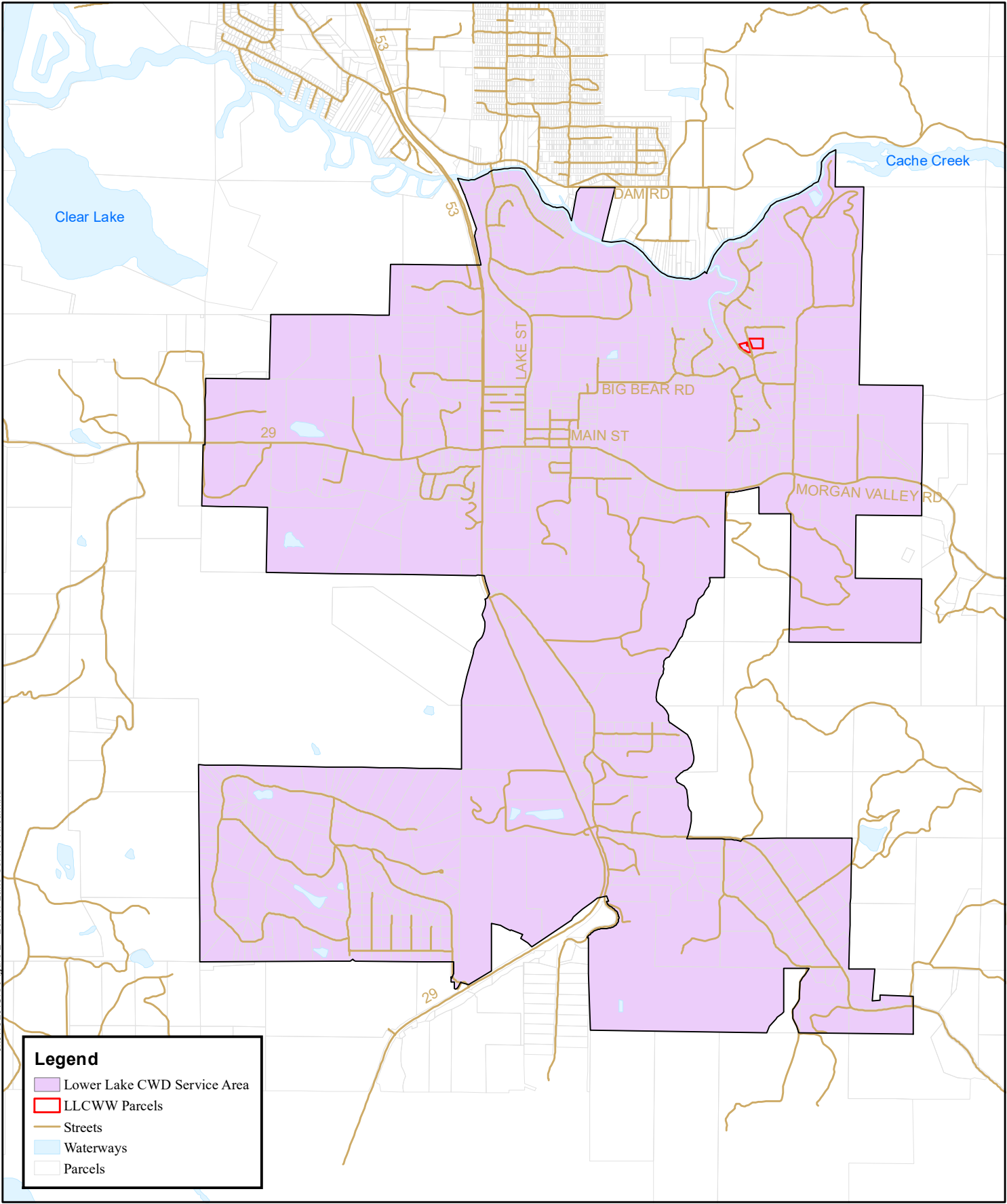


FIGURE 1
PROJECT LOCATION

LOWER LAKE CWWD
 MARCH 2024

J:\J4929\GIS\Figure 2 - Lower Lake Service Area.mxd
2/29/2024 BOLAN



Legend

- Lower Lake CWD Service Area
- LLCWW Parcels
- Streets
- Waterways
- Parcels

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
Parcels: County of Lake
Streets: County of Lake

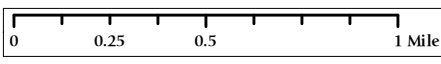


FIGURE 2
LOWER LAKE CWD SERVICE AREA BOUNDARY
LOWER LAKE CWD
MARCH 2024

PROJECT BACKGROUND

The District serves approximately 1,900 people in the unincorporated community of Lower Lake. The water system was originally developed to serve the immediate town of Lower Lake, but has expanded in stages to include the Copsey Creek subdivision to the northeast and the Rancho Sendero Subdivision and Twin Lakes area, located southwest and southeast of town respectively. The boundary of the service area is shown on Figure 3.

Water supply is derived from eight active groundwater wells. An inspection of the water system by the Division of Drinking Water in 2016 included an analysis of source capacity. The maximum day demand in the prior ten years based on production records was 0.692 million gallons (MG) whereas the source capacity was listed at 0.918 MG, more than adequate. Average daily usage during the period was approximately 275,000 gallons per day (gpd) or 190 gallons per minute. Average daily usage in the month of maximum usage was 410,000 gpd or 285 gpm. The maximum day demand was 692,000 gpd in 2010, although the next highest demand on record was over 20% less. Given the structure losses in the 2016 Clayton Wildfire, it will be a long time before the current maximum day demand is exceeded. Currently, the District serves 742 residential and 93 commercial connections.

Well water is treated water and stored in seven tanks having a combined capacity of 1.34 MG. The District's water distribution system consists of a mix of asbestos cement and PVC piping with some of the PVC piping being of the thin-wall variety. Pipe size ranges from three to 12 inches. The smaller and older piping is located in the downtown area (part of the original system) and the Copsey Creek Ranch Subdivision that was developed in the 1960's.



Legend

 LLCWW Parcels

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
Parcels: County of Lake
Streets: County of Lake

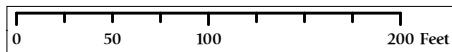


FIGURE 3
PROJECT OVERVIEW

LOWER LAKE CWWD
MARCH 2024

POLICY SETTING

The project occurs within the unincorporated community of Lower Lake in Lake County. Development in the project area is governed by the County of Lake's General Plan and zoning ordinance. The proposed project would primarily be located on the undeveloped parcel, zoned R1-MH-B3, directly across Riverside Drive from the existing water treatment plant. Public water systems are permissible uses in the zoning designation.

PROJECT DESCRIPTION

OVERVIEW

The overall project would include a new water production well, an approximately 100,000-gallon storage tank, and a booster pump station. The facilities would primarily be located on the vacant parcel across Riverview Drive from the District's existing water treatment plant. The proposed project would be constructed in two phases, depending on funding availability. Phase I would include the new well. Phase II would include the storage tank and booster pump. The proposed facilities are shown on Figure 4 and further described below.

NEW WELL

A new well would be constructed on APN 049-021-22 and located to be at least 100 feet from septic systems on adjacent properties. The new well would be fitted with a variable speed pump and a regulatory 50-foot sanitary seal. The new well would provide a regulatory secondary supply well to Well No. 1, located on the adjacent treatment plant, to increase water supply security as a redundant source. The well is expected to be approximately 150 feet deep with an eight-inch casing. A six-horsepower pump is anticipated. A graveled access to the well would be provided for operation and maintenance. The site may be fenced, or fencing may be delayed until Phase II.

Approximately 180 feet of six-inch water main would be installed across Riverside Drive to connect the new well to the existing chlorine contact tank at the existing treatment plant to provide disinfection. A new approximately 100 square foot disinfection room would be added to the north side of the existing control shed to house disinfection equipment. Electrical/controls would be run from the existing control shed to the new well.

STORAGE TANK

An approximately 100,000-gallon bolted steel storage tank would be installed as part of Phase II. The tank would have a diameter of approximately 30 feet and height of approximately 16 to 24 feet. Preliminary site layout includes approximately 50 feet of six-inch water main to connect the well to the new water tank. The tank would be provided with an appropriate seismic resistant foundation.

11-27-23 c:\p\4929\4929.dwg\4929_01\EXHIBIT\CEQA_EXHIBITS.dwg TAB: FIGURE1

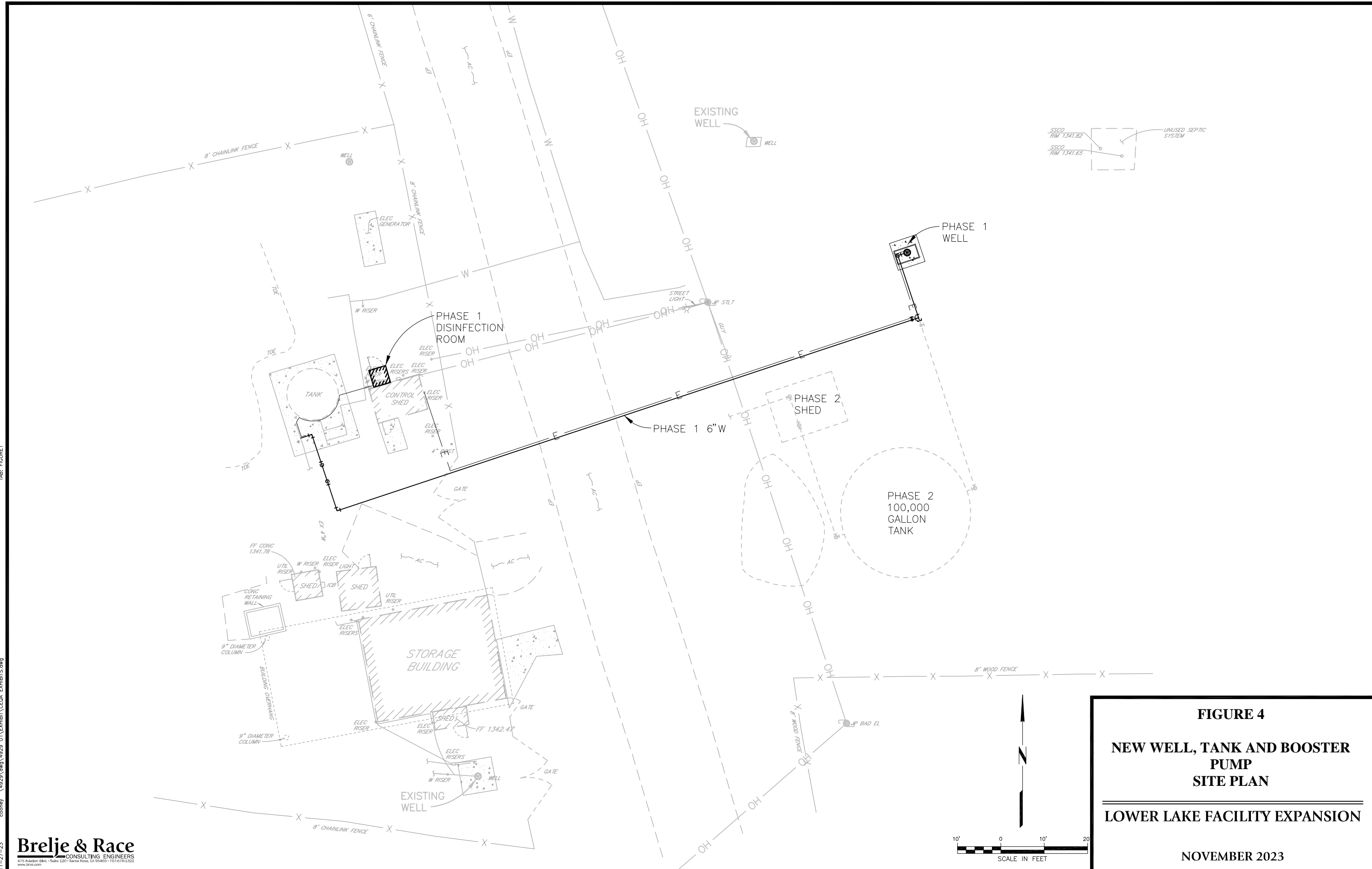
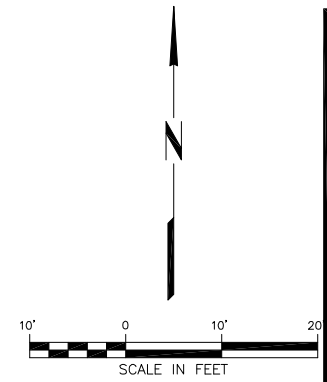


FIGURE 4
NEW WELL, TANK AND BOOSTER PUMP SITE PLAN
LOWER LAKE FACILITY EXPANSION
NOVEMBER 2023



BOOSTER PUMP

A booster pump station would be constructed to provide increased pressure in the area served by Well No. 1 and the new well. The pump station would be housed in an approximately 12-foot by 16-foot building fronting Riverside Drive on the new well parcel. Approximately 50 feet of six-inch water main would be installed to connect the pump station to the existing water main in Riverside Drive. The pump station would consist of three 10- to 15-horsepower pumps, two active and one redundant, and controls. A graveled access would be provided to all new facilities for operation and maintenance.

PROJECT CONSTRUCTION

It is anticipated that construction would include an approximately five-man crew(s) working weekdays. Equipment is anticipated to include: a well drilling rig, an excavator, a loader, a dump truck, a skip loader, an air compressor, a transport truck, an earth compactor, a pavement grinder, and a paving machine. Operations and material stockpiling would be constrained to paved or disturbed areas on the project site.

Schedule

It is anticipated that Phase I construction would last approximately two months during summer 2024. It is unknown when funding may be secured for the Phase II project, but construction would be approximately three months in duration. It is assumed that there would be two crews working on different parts of the project.

Construction Equipment and Activities

PHASE I—NEW WELL

The new well would be drilled with a drill rig. Spoils and well test pump water would be contained on-site. A concrete truck would be utilized to pour the well pad. The pipelines would be installed using open cut trenching across Riverview Drive and within existing graveled or disturbed areas. Trench backfilling would begin immediately after the pipe was installed in the trenches. Appropriate backfill materials would be used to prevent damage to the pipelines and allow adequate backfill compaction using appropriate equipment. Imported backfill would be delivered to stockpiles near the open trenching. Once backfilling is complete, surface restoration would be completed. Typical surface restoration within paved roadways would include compacting 12 inches of slurry cement and installing a pavement patch that extends six inches beyond each side of the trench over its entire length after backfilling and compaction are complete. The surface restoration crew would typically use a grinder, a skip loader, a roller, and a paving machine.

Phase II—Tank and Pump Station

Site work at the tank and pump station building sites would require similar equipment and crews as the pipeline installation with the addition of a skip loader and compactor. It is anticipated that each site will require about a week for site work and a week for subsurface utility installation.

Once the site has been prepared it is anticipated a crew using an excavator and skid steer or skip loader supported by a dump truck would excavate both the tank and building foundations. It is anticipated that spoils could be accommodated on the site.

Once a site has been prepared for foundation it is anticipated that the contractor would use handheld electric tools including electric demolition hammers, saws and air compressors. It is anticipated the building would be constructed with a standard crew using electric power handheld tools and hand tools supported by a telehandler. Construction of the tank is anticipated to be accomplished with one crew. The crew would use a boom truck or telehandler and an air compressor.

GROWTH INDUCEMENT POTENTIAL

The proposed project does not induce growth. The project provides for state-required supply redundancy and storage capacity. Any growth within the District would be according to relevant General Plan and zoning designations currently planned for by the County.

OTHER PUBLIC AGENCY APPROVALS

The project is under District review authority. The project may require additional permitting approvals from the following agencies:

Middletown Rancheria of Pomo Indians

A Cultural Resources Treatment and Monitoring Agreement between the District and the Middletown Rancheria of Pomo Indians will be required for construction of the Phase I and Phase II projects to protect Tribal Cultural Resources.

County of Lake

All work within the County of Lake right of way would require encroachment permits.

Central Valley Regional Water Quality Control Board

CVRWQCB has discretionary authority regarding the following permits and approvals:

- NPDES permit. The U.S. Environmental Protection Agency (EPA) has delegated responsibility for issuance of Clean Water Act (CWA) NPDES permits to the Regional Water Quality Control Boards within California. These permits are required to ensure protection of surface waters from construction and other land-disturbing activity.

State of California Water Resources Control Board, Division of Drinking Water (DDW)

DDW may require an amendment to the existing water systems' operating permits to recognize the new facilities.

ENVIRONMENTAL SIGNIFICANCE CHECKLIST:

The following list of questions is provided by Appendix G of the CEQA Guidelines, in order to determine a project's environmental impacts. The checklist utilized herein was updated by the State of California in 2019.

Based on the project description, answers to the questions fall into one of four categories:

- Potentially Significant Impact
- Less Than Significant Impact with Mitigation Incorporation
- Less Than Significant Impact
- No Impact

With regard to the checklist, a “No Impact” response indicates that no impact would result from implementation of the project. A “Less Than Significant Impact” response indicates that an impact would occur, but the level of impact would be less than significant. A “Less Than Significant with Mitigation Incorporation” response indicates that an impact is involved, and, with implementation of the identified mitigation measure, such impact would be less than significant. A “Potentially Significant Impact” response indicates that there is substantial evidence that impacts may be significant if mitigation measures are unknown, infeasible, or not proposed. Each response is discussed at a level of detail commensurate with the potential for adverse environmental effect.

The discussion following each checklist item consists of an *Analysis* section, a *Cumulative Impacts* discussion, and a section for identification of *Mitigation Measures*, as necessary. The *Analysis* section includes a discussion addressing whether the project would result in potential adverse environmental impacts. All potential impacts have been considered, including on-site and off-site impacts, direct and indirect impacts, construction and operation-related effects, as well as cumulative effects. The recently updated 2019 CEQA Guidelines contain revised regulations relative to the project's potential for contributing to cumulative effects¹. The *Cumulative Impacts* section presents information regarding the project's potential cumulative impacts and is included in this section. If an impact(s) has been identified and mitigation is identified to reduce the impact to a less than significant level, then such measures are contained in the *Mitigation Measures* sections.

¹ California Environmental Quality Act Guidelines, §15064(i).

I AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Environmental Setting

The project is located within the developed unincorporated community of Lower Lake and is surrounded by lower density residential development. The major sources of light and glare in the project vicinity are from residential development. Highway 53 is an eligible state scenic highway but is not officially designated². There are no other designated scenic highways in the project area.

Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. Although the project area is not considered to be a scenic vista for the purposes of this environmental analysis, the overall area does have characteristics that people would consider aesthetically pleasing and a positive visual resource. The project location is flat and surrounded by lower density residential development with the existing water treatment facility immediately to the west.

The proposed project would not result in the disturbance or elimination of open space areas or remove an object of aesthetic value. The project would not result in long-term physical adverse changes to the height or bulk of structures or view blockages within the view shed of the project area or along Highway

² http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

53. The project site is approximately one mile east of Highway 53 and is not visible from the highway due to topography. The well would be located at grade with up to six feet of piping above grade. The water main connecting the new well to the existing treatment plant would be below ground. The Phase 2 booster pump station would be in a small 12-foot by 16-foot building, approximately 15 feet high. The Phase 2 storage tank would be approximately 16 to 24 feet high and 30 feet in diameter. Therefore, obstruction of scenic views will be minimal and consistent with those of a single-family residence.

Construction activities would create dust, expose soil from grading, and create soil piles from trenching and excavation but would cease after construction is complete. Short-term construction impacts associated with the project would not have a significant impact on any scenic vista.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Highway 53 is designated as an eligible state scenic highway but is not officially designated. The project is approximately one mile east of Highway 53 and none of the project elements would be visible from the highway. The proposed project would not introduce features that would adversely affect the use of Highway 53 as a scenic roadway, should it be officially designated, and would have no impact.

c. In nonurbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project would not significantly degrade the existing visual character of the project area. The well and associated water main would be installed below grade. The future booster pump station and storage tank would be above ground but not out of character with the adjacent water treatment plant facility and not dissimilar in mass to adjacent residential units. The project would not degrade the existing visual character of the site or surroundings.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project would not create a new substantial source of light or glare. Minor nighttime security lighting may be installed but will not result in substantial light or glare.

Cumulative Impacts

There are no adverse cumulative environmental impacts to aesthetic resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to aesthetic resources have been identified; therefore, no mitigation is required.

II AGRICULTURAL & FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The zoning of the project location is Single Family Residential (R1-MH-B3). Apart from the existing water treatment facility, land uses in the project area are primarily residential. There are no formal agricultural uses adjacent to the project location.

Regulatory Setting

FARMLAND MAPPING AND MONITORING PROGRAM

Agricultural lands within the state of California are rated according to soil quality and irrigation status by the Farmland Mapping and Monitoring Program (FMMP). The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. The best quality land is called Prime Farmland, followed by Unique Farmland, Farmland of Statewide Importance, and so on, in decreasing order of importance. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance.

The project area is entirely designated as Urban and Built-up Land, as shown on Figure II-1. None of the project areas are zoned for agricultural uses.

WILLIAMSON ACT

Agricultural land in the project area may also be subject to the California Land Conservation Act of 1965, more commonly referred to as the Williamson Act. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are lower than normal because they are based on farming and open space uses as opposed to full market value. None of the land in the project area is under contract under the Williamson Act nor is it zoned for agricultural uses.

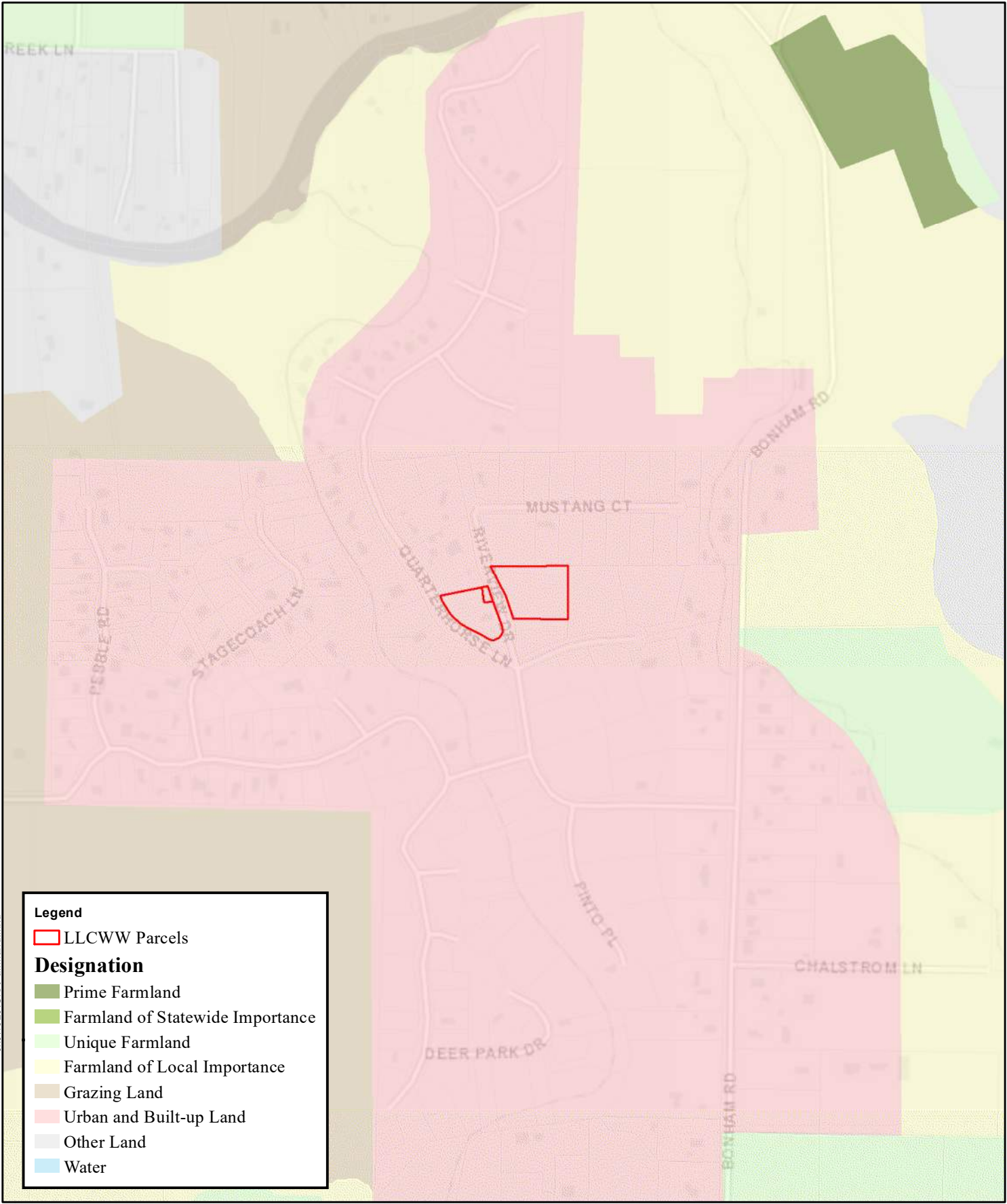
Analysis

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

As shown on Figure II-1, the Farmland Mapping and Monitoring Program³ designates the project location and its surrounding area as Urban and Built-up Land. Project components would be located within the undeveloped residential lot or developed roadway, areas that do not support farmland. The project would not convert Farmland to non-agricultural uses.

³ *Lake County Important Farmland—2016*. Farmland Mapping and Monitoring Program of the California Resources Agency.

J:\J4929\GIS\Farmland.mxd
WITT
3/21/2024



Legend

- LLCWW Parcels

Designation

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-up Land
- Other Land
- Water

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
California Department of Conservation

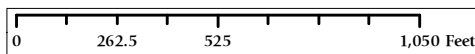


FIGURE II-1
IMPORTANT FARMLAND

LOWER LAKE CWWD
MARCH 2024

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project location is not under a Williamson Act contract and is not zoned for agricultural uses.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Forest land, as defined by the U.S. Forest Service, includes land at least 10 percent of which is stocked by trees of any size, or land formerly having had such tree cover that would be naturally or artificially regenerated. Forest land includes transition zones, such as areas between heavily forested and non-forested lands that are at least 10 percent stocked with forest trees and forest areas adjacent to urban and built-up lands.

The project does not propose any activities related to timber harvest nor would it result in the conversion of forest land to non-forest uses. As shown on Figure II-2, there are no timber zoning designations or significant public lands within several miles of the project location. There are no existing trees on the project site that would be removed associated with the project. As such, there would be no impact to forest land or conversion of designated land to non-forest uses. The project location is not zoned for and does not currently support timberland.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

The project location does not currently support forest land and the project area is largely developed with residential uses. The proposed project would not result in any impact to forest land.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

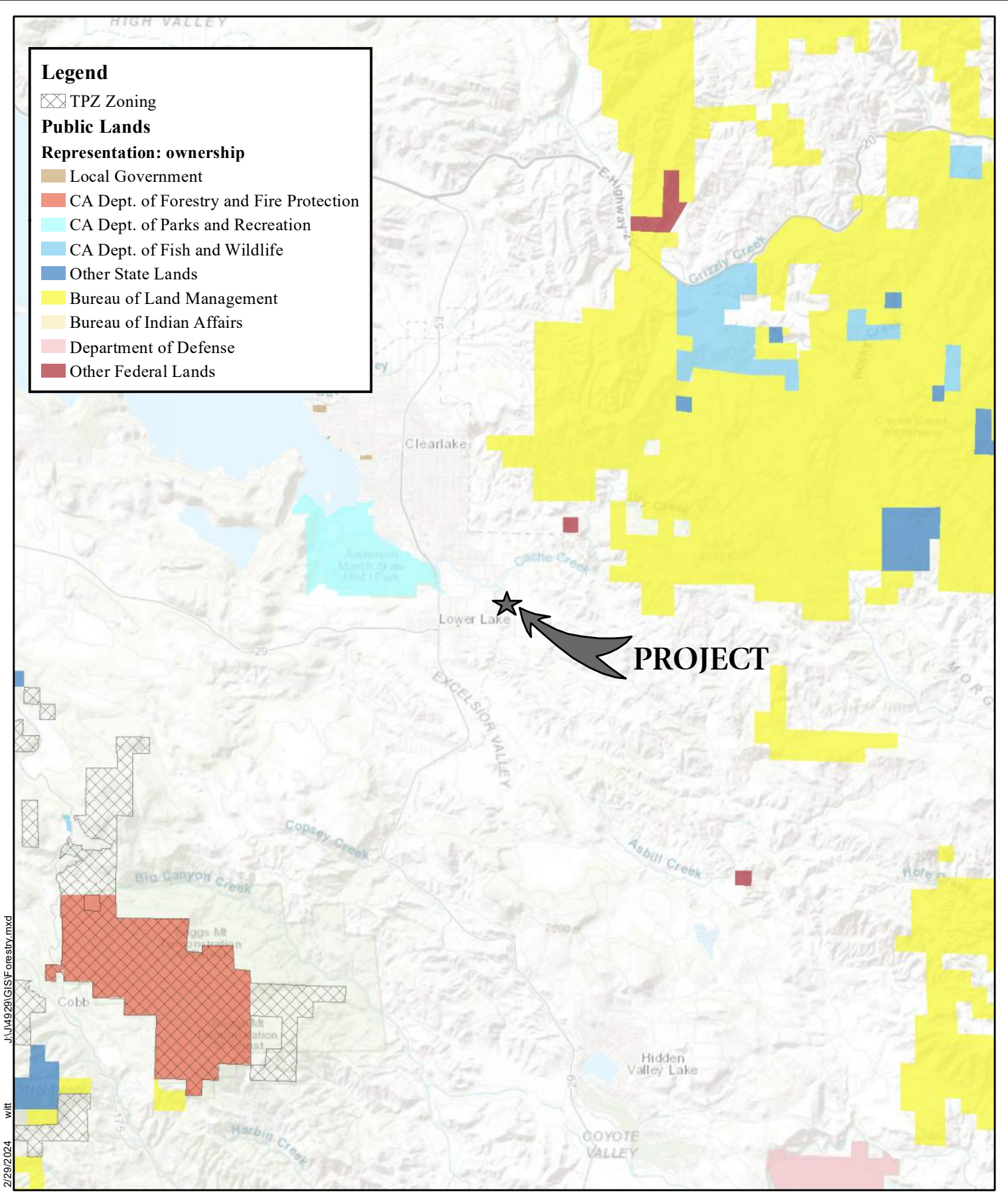
Because the project would be located in an area that is not zoned for and does not currently support Farmland or forest land, the project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Cumulative Impacts

There are no adverse cumulative environmental impacts to agricultural and forestry resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to agricultural and forestry resources have been identified; therefore, no mitigation is required.



Legend

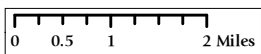
⊠ TPZ Zoning

Public Lands

Representation: ownership

- Local Government
- CA Dept. of Forestry and Fire Protection
- CA Dept. of Parks and Recreation
- CA Dept. of Fish and Wildlife
- Other State Lands
- Bureau of Land Management
- Bureau of Indian Affairs
- Department of Defense
- Other Federal Lands

PROJECT



**FIGURE II-2
FORESTRY RESOURCES**

**LOWER LAKE CWWD
MARCH 2024**

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

Data Source Information:
 Public Lands: CalFire (2017)



2/29/2024 witt JJ\J4929\GIS\Forestry.mxd

III AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations:

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

LAKE COUNTY AIR BASIN

The project area is located in the Lake County Air Basin (LCAB), which is contiguous with the boundaries of Lake County and the local air quality agency, the Lake County Air Quality Management District (LCAQMD). The LCAB is located within the northern Coast Ranges of California. This mountain system consists of long, parallel ridges which trend from the south to the north. In Lake County, the mountain pattern is conspicuously interrupted by the Clear Lake Basin. Clear Lake occupies this basin in approximately the middle one-third of the county. The northern third of the county is largely unoccupied, much of it lying within the Mendocino National Forest. Mountains are also predominant in the southern one-third of Lake County. The topography ranges from a low of approximately 1,100 feet in elevation to over 7,000 feet at the peaks of the surrounding coastal range.

REGIONAL CLIMATE AND METEOROLOGY

Lake County climate, like much of California, is Mediterranean in nature. Summers are warm and dry, and winters are cool and moist. Much local variation is standard in Lake County, reflective of its mountainous character. Lake County is near the edge of a more transitional climatic zone, which is influenced more by the Pacific Ocean. Its proximity to the oceanic influence, elevation, and mountainous influence combine to create a local climate that is somewhat more severe than many other parts of California. Rainfall predominantly occurs during the months of November through March. The normal historic rainfall average is approximately 31 inches annually. Winds are generally light due to the sheltering effect of surrounding mountains, with predominant winds from the northwest, particularly in the summer months. Wind during the winter months tends to be more variable in direction. Average predominant wind speeds throughout the year are typically less than five miles per hour.

Regulatory Setting

Air quality in the project vicinity is regulated by several jurisdictions, including EPA, ARB, and LCAQMD. These entities, described below, develop rules, regulations, and policies to attain the goals or directives imposed upon them through legislation.

FEDERAL REGULATIONS

The Clean Air Act

The Federal Clean Air Act (FCAA) required the US EPA to establish National Ambient Air Quality Standards (NAAQS) and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. The FCAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The US EPA has responsibility to review all state SIPs to determine conformance to the mandates of the CAA, and the amendments thereof, and determine if implementation would achieve air quality goals. If the US EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area that imposes additional control measures. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Federal Conformity Requirements

The CAA Amendments of 1990 require that all federally funded projects come from a plan or program that conforms to the appropriate State Implementation Plan (SIP). Federal actions are subject to either the Transportation Conformity Rule (40 Code of Federal Regulations [CFR] 51[T]), which applies to federal highway or transit projects, or the General Conformity Rule (40 CFR 51[W]), which applies to all other federal actions.

STATE REGULATIONS

California Clean Air Act

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act of 1988. The California Clean Air Act (CCAA) requires that all air districts in the state endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for ozone, CO, sulfur dioxide (SO₂), and nitrogen dioxide (NO₂) by the earliest practical date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors, or (2) provide for implementation of all feasible measures to

reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

LOCAL REGULATIONS

Lake County Air Quality Management District (LCAQMD)

The LCAQMD is designated by law to adopt and enforce regulations to achieve and maintain ambient air quality standards. The LCAQMD is a regional agency created by the state that regulates stationary sources of air pollution within the LCAB. The District also regulates open burning and is delegated a variety of other programs such as state Air Toxic Control Measures (ATCMs) and federal New Source Performance Standards (NSPSs). The main purpose of the LCAQMD is to enforce local, state, and federal air quality laws, rules, and regulations in order to maintain the ambient air quality standards (AAQs) and protect the public from air toxics through local, CARB ATCM, and federal EPA NESHAP specific control regulations. Because the county is an attainment area (or is unclassified) for all criteria pollutants, both federal and state, it is not required to prepare air quality attainment/management plans.

CRITERIA POLLUTANTS

Pollutants subject to federal ambient standards are referred to as “criteria” pollutants because the United States Environmental Protection Agency (US EPA) publishes criteria documents to justify the choice of standards. Current California and Federal standards for certain types of pollutants are shown below.

Pollutant	Averaging Time	State Standard	Federal Primary Standard
Ozone	1-Hour	0.09 ppm	--
	8-Hour	0.07 ppm	0.070 ppm
PM10	Annual	20 ug/m ³	--
	24-Hour	50 ug/m ³	150 ug/m ³
PM2.5	Annual	12 ug/m ³	12 ug/m ³
	24-Hour	---	35 ug/m ³
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	20.0 ppm	35.0 ppm
Nitrogen Dioxide	Annual	0.03 ppm	.053 ppm
	1-Hour	0.18 ppm	100 ppb
Sulfur Dioxide	24-Hour	0.04 ppm	.14ppm
	3-Hour	--	--
	1-Hour	0.25 ppm	75 ppb
Lead	30-Day Avg.	1.5 ug/m ³	--
	Calendar Quarter	--	1.5 ug/m ³
	3-Month Avg.	--	0.15 ug/m ³

ppm = parts per million

ppb = parts per billion

ug/m³ = Micrograms per Cubic Meter

The federal and California ambient air quality standards are defined below for criteria pollutants. The federal and state ambient standards were developed independently with differing purposes and methods, although both federal and state standards are intended to avoid health related effects.

Federal

- Nonattainment: any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.
- Attainment: any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant.
- Unclassifiable: any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

State

- Unclassified: a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- Attainment: a pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a three-year period.
- Nonattainment: a pollutant is designated nonattainment if there was at least one violation of a State standard for that pollutant in the area.
- Nonattainment / Transitional: is a subcategory of the nonattainment designation. An area is designated nonattainment / transitional to signify that the area is close to attaining the standard for that pollutant.

MONITORING STATION DATA

Ambient air quality measurements are routinely conducted at nearby air quality monitoring stations. LCAQMD maintains four monitoring stations and is designated as attainment or unclassified for all state and federal standards. Because the county is an attainment area (or is unclassified) for all criteria pollutants it is not required to prepare air quality attainment/management plans.

Both the California Air Resources Board (CARB) and the US EPA use this type of monitoring data to designate areas according to attainment status for criteria air pollutants established by the agencies. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvements. The three basic designation categories are nonattainment, attainment, and unclassified, as defined above.

The LCAB is currently designated either attainment or unclassified/attainment for all state and national ambient air quality standards⁴. For this reason, the LCAQMD has not been required to prepare ambient air quality attainment plans for the basin.

⁴ <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>

Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project is located within the LCAQMD. The LCAQMD is designated to be in attainment or unclassified for all federal and state constituents (see b, below). The LCAQMD does not have an applicable air quality plan as air quality meets attainment standards. The project would not impact air quality plans.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The LCAQMD is responsible for monitoring and reporting air quality data for the Lake County air basin. Both the U. S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels that avoid specific adverse health effects associated with each pollutant, termed criteria pollutants.

As shown in the table below, the LCAQMD is designated to be in attainment or unclassified for all federal constituents and in attainment or unclassified for all state constituents. The LCAQMD does not have any air quality management plans as air quality meets attainment standards.

Standard	2022 State Status ⁵	2022 Federal Status
Ozone 8-Hour	Attainment	Unclassified/Attainment
Ozone 1-Hour	Attainment	N/A
PM2.5	Attainment	Unclassified/Attainment
PM10	Attainment	Unclassified
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	N/A
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Attainment	N/A
Visibility Reducing Particles	Attainment	N/A

The LCAQMD has not adopted its own thresholds of significance for project emissions. For air quality impacts, the Sacramento Metropolitan Air Quality Management District (SMAQMD) provides useful guidance in assessing project impacts on attainment status. The SMAQMD’s 2020 Guide to Air Quality Assessment in Sacramento County (CEQA Guide)⁶ establishes recommended thresholds of significance

⁵ <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>

⁶ <https://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>

for criteria pollutants for project construction and operation for CEQA analysis. The CEQA Guide also provides screening levels for projects to guide determining if an air quality analysis is required.

For assessing NO_x, Section 3.3.1 of the CEQA Guide indicates:

Projects that are 35 acres or less in size generally will not exceed the SMAQMD's construction NO_x threshold of significance. This screening level was developed using default construction inputs in the California Emissions Estimator Model (CalEEMod). Lead agencies cannot use the screening level to determine if a project's construction NO_x emissions will have a less-than significant impact on air quality if any of the following parameters are included in the project. In order to use the screening level, the project cannot include any of these parameters: 1) Include buildings more than 4 stories tall; 2) include demolition activities; 3) include major trenching activities; 4) have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously; 5) involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and 6) require import or export of soil materials that will require a considerable amount of haul truck activity.

The project site is approximately 1.76 acres and considerably less than that which will be subject to construction activities, well under the 35-acre screening level. None of the excluding parameters above would be part of the project. Minor site grading would occur and minor import of pipe bedding material would be required but are well under the levels associated with the parameters. The project would therefore have a less than significant impact to NO_x levels.

For assessing particulate matter emissions (PM), Chapter 3 of the CEQA Guide indicates:

The SMAQMD utilizes the same screening level as the NO_x emission screening level to assist a project proponent or lead agency in determining if PM emissions from constructing a project in Sacramento County will exceed the SMAQMD's construction significance thresholds for PM₁₀ and PM_{2.5}. Construction of a project that does not exceed the screening level, meets all the screening requirements in Section 3.3.1 (i.e., cannot include any of the parameters listed in Section 3.3.1), and implements the SMAQMD's Basic Construction Emission Control Practices (also known as Best Management Practices [BMPs]) will be considered to have a less-than-significant impact on air quality.

As indicated above, the project site is well under the 35-acre screening level and none of the parameters listed in Section 3.3.1 apply. Mitigation Measure AQ1 includes the recommended by the SMAQMD's Basic Construction Mitigation Measures and reduces such impacts to a less than significant level.

Based on the above, emissions associated with project construction are considered to be less than significant with the inclusion of Mitigation Measure AQ1. Project operational emissions would be essentially unchanged as LLCWD operations staff already drive to and from the site and operational activities would not increase in any significant way.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Schools and hospitals are considered sensitive receptors. The nearest school is approximately 0.5 mile to the west. The nearest hospital is approximately two miles to the northwest.

As a water project, operation of the project would not alter air quality in any appreciable way. During the construction phase of the project, generation of dust and equipment exhaust can be expected to increase. A portion of this dust would contain PM10 and PM2.5, which are criteria air pollutants regulated at both the federal and state levels. Diesel particulate matter would be emitted by construction equipment and trucks. Equipment operation and trucks also emit nitrogen oxides during construction that contribute to regional ozone levels.

Although demolition, grading and construction activities would be temporary, they would have the potential to cause both nuisance and health air quality impacts. PM10 is the pollutant of greatest concern associated with dust. If uncontrolled, PM10 levels downwind of actively disturbed areas could possibly exceed state standards. While no sensitive receptors are near the project, construction activities in the project area could impact residents adjacent to the project. To mitigate air quality impacts associated with exposing sensitive receptors to substantial pollutant concentrations to less than significant levels, Mitigation Measure AQ1 shall be implemented.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people??

The project would not create objectionable odors or other emissions. The project includes water production, storage and distribution facilities that are not associated with the creation of odors.

Cumulative Impacts

There are no adverse cumulative environmental impacts to air quality resulting from implementation of the proposed project.

Mitigation Measures

AQ1

The following Basic Construction Emission Control Practices, as described by the Sacramento Metropolitan Air Quality Management District, shall be implemented during construction to minimize fugitive dust and emissions:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- A publicly visible sign shall be posted with the telephone number and person to contact at the District regarding dust complaints. This person shall respond and take corrective action within 48 hours. The LCAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

IV BIOLOGICAL RESOURCES

On January 4, 2024, Sol Ecology, Inc. performed a biological resources survey for the Project. The purpose of the biological assessment is to review the project in sufficient detail to determine to what extent the proposed action may affect any endangered or threatened species or designated critical habitats and to gather information necessary to complete a review of potential biological resource impacts from development of the proposed project, under the guidelines of the California Environmental Quality Act (CEQA). The Sol Ecology report describes the results of the site survey and assessment of the project site for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. Excerpts of the report are contained in this section⁷.

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁷ 9310 Riverview Drive Well Replacement Project, Lake County, CA. Sol Ecology, Inc. March 8, 2024.

Overview

METHODS

Literature Review

Prior to the site visit, the Soil Survey of Lake County, California [U.S. Department of Agriculture (USDA) Web Soil Survey, Google Earth aerial images, USGS topographic quadrangle maps were examined to determine if any unique soil types that could support sensitive plant communities and/or aquatic features were present in the project study area. A Manual of California Vegetation, Online Edition (CNPS 2019a) was reviewed to assess the potential for sensitive biological communities to occur in the project study area. All alliances within the project study area with a ranking of 1 through 2 were considered sensitive biological communities and mapped if present.

Potential occurrence of special-status species in the project study area was evaluated by first determining which special-status species occur near the project study area through a literature and database search. Database searches for known occurrences of special-status species focused on the Lower Lake 7.5-minute USGS quadrangle and the surrounding USGS quadrangles. The following sources were reviewed to determine which special-status plant and wildlife species have been documented to occur in the surrounding vicinity of the project study area.

- California Native Plant Society's (CNPS's) A Manual of California Vegetation Online Edition (CNPS 2023a)
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2023a)
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019) CNPS's Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute Lower Lake quadrangle and eight adjacent quadrangles (CNPS 2023b)
- California Natural Diversity Database (CNDDDB) search for USGS 7.5-minute Lower Lake quadrangle and eight adjacent quadrangles (CDFW 2023, Appendix B)
- USFWS Information for Planning and Conservation Species Lists (USFWS 2023b; Appendix B)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication California Bird Species of Special Concern (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- Western Bat Working Group Online Species Accounts (WBWG 2015).

Field Survey

Soil Ecology biologists conducted an assessment of the project study area on January 4, 2024, for the presence of sensitive biological communities, including riparian areas, sensitive plant communities recognized by CDFW, habitat connectivity corridors, and scenic corridors. The project study area was also surveyed to determine if any wetlands and waters potentially subject to jurisdiction by the U.S Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), or CDFW are present. This preliminary assessment was based primarily on the presence of wetland plant indicators, hydrology or wetland soils. A

preliminary waters assessment was based on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high-water mark or a defined drainage course.

Sol Ecology biologists also performed reconnaissance-level surveys for special status species on and adjacent to the project study area on January 4, 2024. The focus of the surveys was to identify whether suitable habitat elements for each of the special status species documented in the surrounding vicinity are present on the project study area or not and whether the project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site. Habitat elements examined for the potential presence of sensitive plant species included: soil type, elevation, vegetation community, and dominant plant species. For wildlife species, habitat elements examined included the presence of dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting) habitat. No protocol-level surveys were performed.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special-status species was observed during the site visit, its presence is recorded and discussed. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

Existing Conditions and General Wildlife Use

Biological communities present in the project study area were classified based on existing plant community descriptions described in the California Native Plant Society Online Manual of California Vegetation (CNPS 2024). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations.

Elevations in the project study area range from approximately 1341 to 1348 feet above mean sea level. The project study area encompasses one soil map unit identified by the USDA, NRCS (USDA 2019):

- Kilaga variant loam, 0 to 5 percent slopes: This soil map unit consists of deep to very deep, well drained soils with a parent material of alluvial material formed from mixed rock sources. This soil is found on terraces with 0 to 9 percent. The natural vegetation that this soil typically supports consists of annual grasses and forbs with scattered oaks. This soil is not rated as hydric. Minor components include Unnamed (10%), Unnamed, seasonal high- water table (5%).

No sensitive vegetation communities are present within the project study area. The project study area and immediate surrounding area contains a mixture of annual grassland, ruderal vegetation, and developed land. Annual grassland is confined to the area along the western boundary of the project study area and is outside the proposed area of disturbance. This grassland is dominated by several species of grasses that were unable to be identified due to the time of year during which the surveys were performed. Also within this grassland area are several medium-sized valley oak (*Quercus lobata*) trees that present a small amount of variance in the habitat.

The lot within which the new well is proposed is characterized by heavily disturbed ruderal vegetation that is dominated by non-native forbs such as common mustard (*Brassica rapa*), yellow star thistle (*Centaurea solstitialis*), longbeak stork's bill (*Erodium botrys*), among others. Several smaller valley oaks are growing behind

the fence along the eastern boundary of the project study area. Portions of this ruderal vegetation are much more disturbed than others, being covered with soil or entirely barren in patches.

The developed portions of the project study area consist of the facilities yard present within the western property where the current water tank and equipment storage areas are located. Additionally, the paved surface of Riverview Drive bisects the project study area, which exhibits some ruderal vegetation along the road shoulder.

Analysis

- a. **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?**

Special-Status Plant Species

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory) with California Rare Plant Ranks of 1 and 2 are also considered special-status plant species and must be considered under CEQA.

Based upon a review of the resources and databases, 19 special-status plant species have been documented within a five-mile radius of the project study area (Figure IV-1); of which four are federal and/or state listed species. Based on the presence of biological communities described above and soils at the site, as well as both historic and recent site disturbance the project study area has the potential to support none of these species; no federal or state listed plant species are likely to be present primarily to the absence of any aquatic or vernal pool habitat and/or serpentine or volcanic soils. All of the proposed work will be performed within existing developed or disturbed areas.

Species documented in the area are unlikely or have no potential to occur on the project study area for one or more of the following reasons:

- Hydrologic conditions (e.g., lake, pond, stream, vernal pool, meadow) necessary to support the special-status plants do not exist on site (e.g., for Cascade downingia, Loch Lomond button-celery, Bolander's horkelia, California satintail, Burk's goldfields, legenera, Baker's navarretia, few-flowered navarretia, eel-grass pondweed, Lake County stonecrop, marsh checkerbloom) note few-flowered navarretia is documented to occur nearby but is not likely to occur on site.
- Edaphic (soil) conditions (e.g., gravelly soil, serpentine, volcanic soils, sandy soils, vertic clay) necessary to support the special-status plants do not exist on site (e.g., for bent-flowered fiddleneck, Konocti manzanita, Jepson's milk-vetch, Hall's harmonia, Sharsmith's western flax, Colusa layia); note Hall's harmonia is documented to occur nearby but is not likely to occur on site.
- Associated vegetation communities (e.g., chaparral, woodland) necessary to support the special-status plants do not exist on site (e.g., for Brandegees' eriastrum, oval-leaved viburnum).

None of these species were observed during the January 4, 2024, site survey. No federal or state listed plant species are likely to be present due to the absence of wetlands and other aquatic resources, the absence of suitable habitat, and/or requisite soil conditions. Because all work will be performed in existing disturbed areas, including existing developed hardscape, and the lack of potential for special status plant species to occur within the project study area, there is no potential for the project to impact special status plants.

Special-Status Wildlife Species

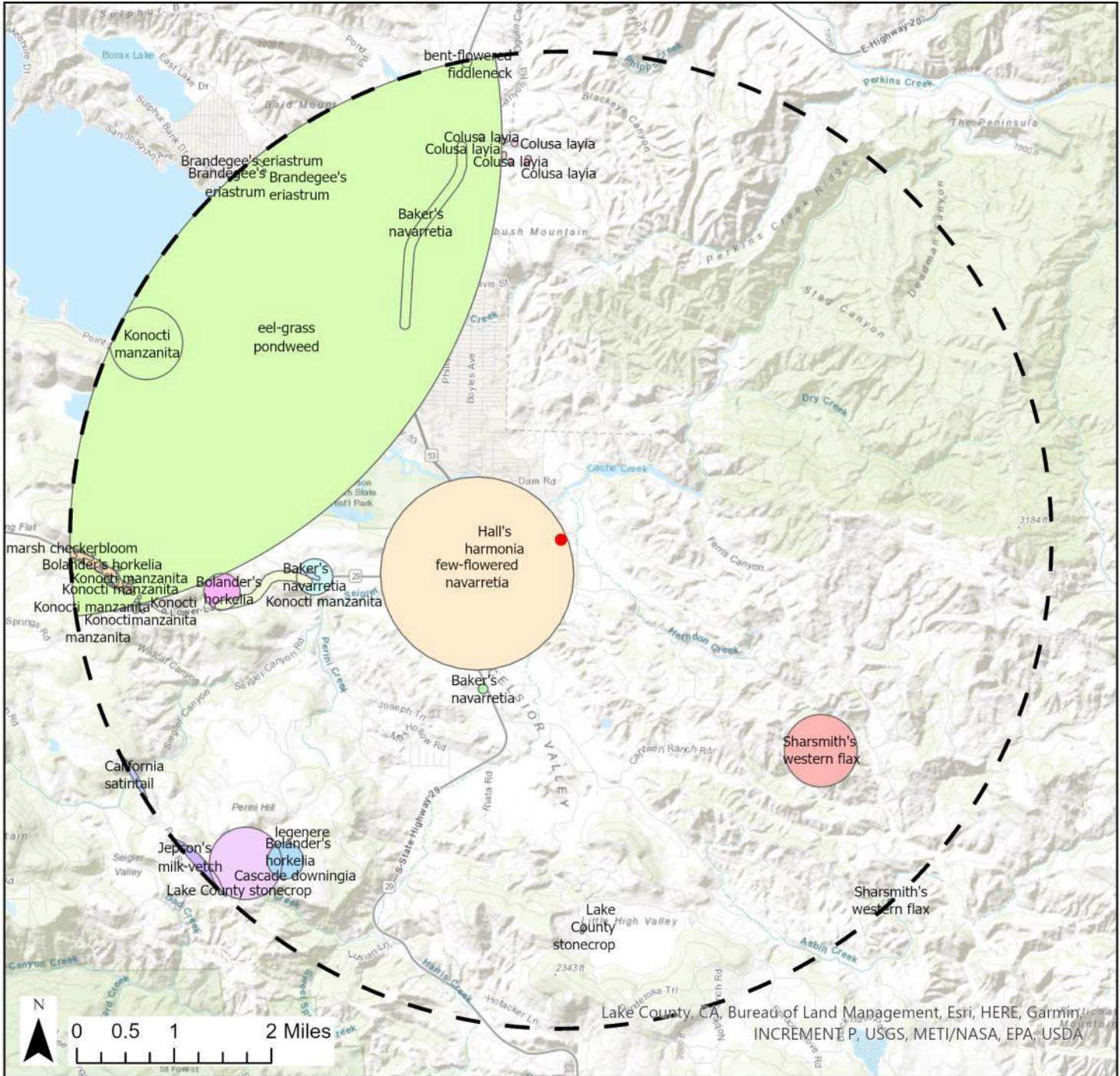
In addition to wildlife listed as federal or state endangered and/or threatened, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Although these species generally have no special legal status, they are given special consideration under CEQA. Furthermore, CDFG Fish and Game Code prohibits the take of actively nesting birds as well as common bats and their roosts.

Eighteen (18) special-status wildlife species have been documented in the vicinity of the project study area, of which five are federal and/or state listed species (Figure IV-2); two additional federal and/or state listed species were also considered based on results of the CNDDDB and USFWS IPaC database searches though not documented within 5 miles. Based on the presence of biological communities described above, the project study area has the potential to support two USFWS birds of conservation concern. The site also provides suitable nesting substrate for many other species of birds protected under the Migratory Bird Treaty Act (MBTA) and CDFW Code. Species with potential to occur on the project study area are described in more detail below. A discussion of potential impacts or unlikelihood for impacts to occur is also provided.

The remaining species found in the review of background literature were determined to be unlikely to occur due to absence of suitable habitat elements in and immediately adjacent to the project study area. Other federal and state listed species are not likely to occur primarily to the absence of suitable aquatic/riparian, vernal pool, or mature forest habitat. Habitat elements that were evaluated but found to be absent from the immediate area of the project study area or surrounding habitats subject to potential indirect impacts include the following:

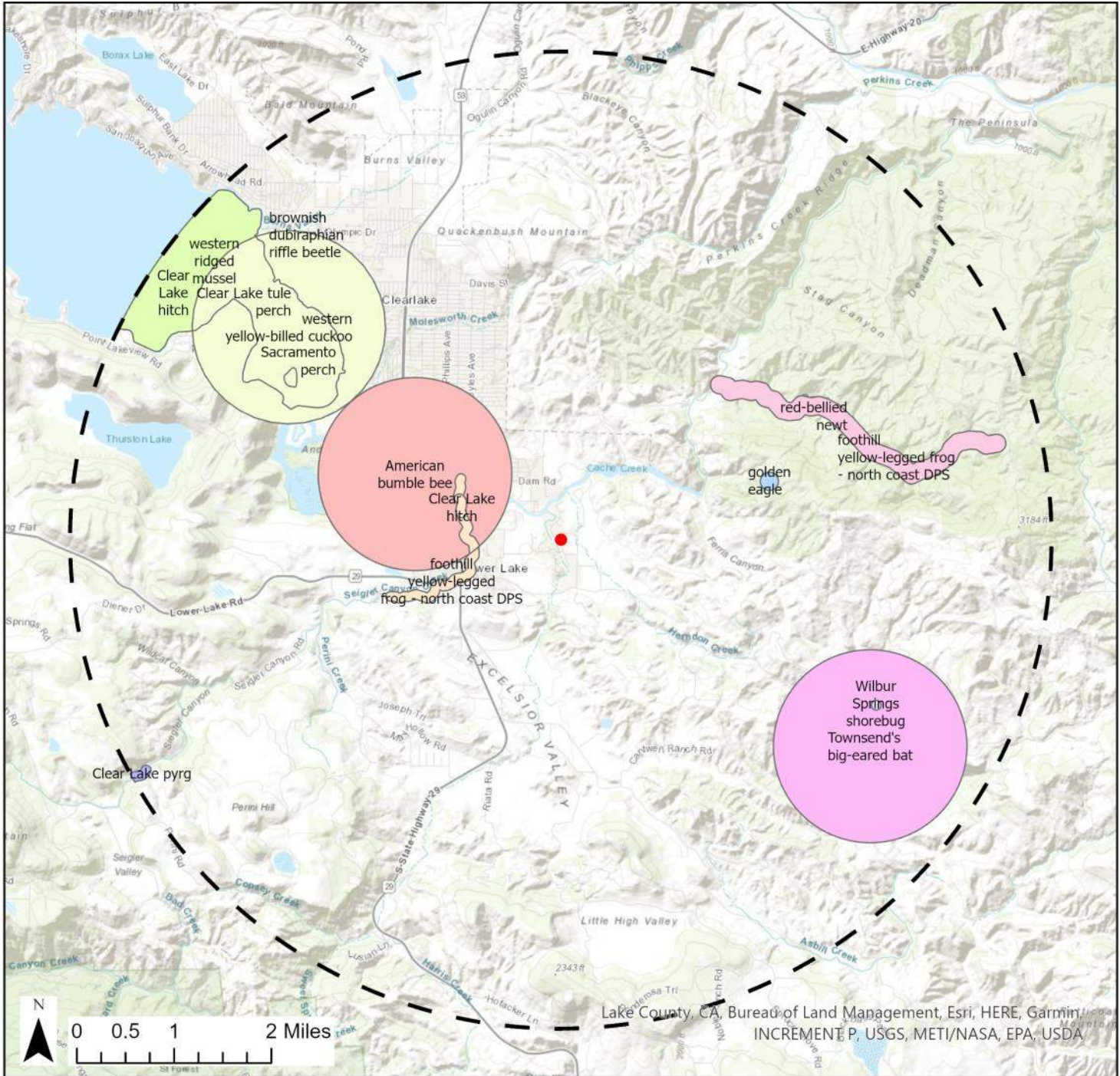
- Associated vegetation communities (e.g., old-growth forest, riparian forest, open woodland) necessary to support the special-status wildlife do not exist on site (e.g. northern spotted owl, western yellow-billed cuckoo, purple martin).
- Aquatic habitat such as streams, ponds, or wetlands (e.g., Clear Lake hitch, Clear Lake tule perch, Sacramento perch, California giant salamander, red-bellied newt, California red-legged frog, foothill yellow-legged frog, northwestern pond turtle).
- Proximity to undisturbed tree cavities or structures suitable for bat roosting (e.g., for pallid bat, Townsend's big-eared bat, western red bat).
- Proximity to large trees, cliffs, or structures (e.g., golden eagle, bald eagle).
- Proximity to the coastal habitats and/or presence of host plant species (e.g., monarch butterfly, Allen's hummingbird).

Figure IV-1 Special Status Plant Species within 5 Miles of the Project Site
 9310 Riverview Drive, Lower Lake, CA



- | | | |
|-------------------------|-----------------------------|----------------------------|
| ● Project Location | ■ Cascade downingia | ■ Sharsmith's western flax |
| ┌─┐ 5 Miles | ■ Colusa layia | ■ bent-flowered fiddleneck |
| ■ Baker's navarretia | ■ Hall's harmonia | ■ eel-grass pondweed |
| ■ Bolander's horkelia | ■ Jepson's milk-vetch | ■ few-flowered navarretia |
| ■ Brandegee's eriastrum | ■ Konocti manzanita | ■ legenera |
| ■ Burke's goldfields | ■ Lake County stonecrop | ■ marsh checkerbloom |
| ■ California satintail | ■ Loch Lomond button-celery | ■ oval-leaved viburnum |

Figure IV-2 Special Status Wildlife Species within 5 Miles of the Project Site
 9310 Riverview Drive, Lower Lake, CA



- Project Location
- 5 Miles
- American bumble bee
- Clear Lake hitch
- Clear Lake pyrg
- Clear Lake tule perch
- Sacramento perch
- Townsend's big-eared bat
- Wilbur Springs shorebug
- brownish dubiraphian riffle beetle
- foothill yellow-legged frog - north coast DPS
- golden eagle
- red-bellied newt
- western ridged mussel
- western yellow-billed cuckoo

Nuttall's woodpecker (*Picoides nuttallii*) USFWS Bird of Conservation Concern. Nuttall's Woodpecker, common in much of its range, is a year-round resident throughout most of California west of the Sierra Nevada. Typical habitat is oak or mixed woodland, and riparian areas (Lowther 2000). Nesting occurs in tree cavities, principally those of oaks and larger riparian trees. Nuttall's woodpecker also occurs in older residential settings and orchards where trees provide suitable foraging and nesting habitat. This species forages on a variety of arboreal invertebrates. It may nest on the project study area in the medium sized valley oaks on the west end of the project study area or in a large valley oak adjacent to the site on the north neighbor's property.

Oak titmouse (*Baeolophus inornatus*) USFWS Bird of Conservation Concern. This relatively common species is year-round resident throughout much of California including most of the coastal slope, the Central Valley and the western Sierra Nevada foothills. In addition, the species may also occur in residential settings where landscaping provides foraging and nesting habitat. Its primary habitat is woodland dominated by oaks. Local populations have adapted to woodlands of pines and/or junipers in some areas (Cicero 2000). The oak titmouse nests in tree cavities, usually natural cavities or those excavated by woodpeckers, though they may partially excavate their own (Cicero 2000). Seeds and arboreal invertebrates make up the birds' diet. This species may nest on the project study area in the medium sized valley oaks on the west end of the project study area or in a large valley oak adjacent to the site on the north neighbor's property.

No federal or state threatened or endangered species (or candidate/proposed) have potential to be present on the project study area based on the absence of essential habitat elements (aquatic resources) and/or vegetation communities for these species. However, two birds of conservation concern, as well as common migratory bird species, may nest in trees on or immediately adjacent to the project study area. Noise-generating activities above ambient noise-level conditions may impact nesting birds by causing them to abandon their nests during incubation and/or chick feeding periods. Such impacts are considered significant under CEQA. To reduce this potential impact to less than significant, preconstruction nesting bird surveys are required by mitigation measure BIO1.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

No sensitive biological communities are present within the project study area. As such, no impacts to sensitive communities are anticipated.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The project site was surveyed for wetlands. No wetlands were observed at the project sites and the majority of those sites are already developed or paved.

- d. **Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The project site does not support wildlife nursery sites and is not representative of a wildlife migratory corridor.

- e. **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No trees would be removed by the project.

- f. **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

The project location is not part of an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Cumulative Impacts

There are no adverse cumulative environmental impacts to biological resources resulting from implementation of the proposed project.

Mitigation Measures

BIO1

To avoid impacts to migratory birds (Protected under MBTA and CDFG Code), noise-generating activities exceeding ambient conditions should be initiated outside the nesting bird season either before March 1 or after August 31. If work must be initiated during the nesting season, the following avoidance and minimization measures shall be implemented:

- A pre-construction nesting bird (both passerine and raptor) survey of suitable nesting habitat within the project study area and/or adjacent habitats should be performed within 10 days of groundbreaking. If no nesting birds are observed, no further action is required. A follow up survey is required if a stoppage in work occurs for longer than 10 days between March 1 and July 1; initiation of new nests is not anticipated after July 1
- If active bird nests (passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged or the nest has naturally failed or been predated, as determined by a qualified biologist. The radius of the required buffer zone can vary depending on the species and status of the nest. The dimension of any required buffer zone should be determined by a qualified biologist.

V CULTURAL RESOURCES

Section 15064.5(a) of CEQA includes a broad definition of historical and archaeological resources as follows:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:
 - (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (B) Is associated with the lives of persons important in our past;
 - (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
 - (D) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Cultural Resources Investigation was conducted for the project area by Dr. Greg White, principal investigator of Sub-Terra Heritage Resource Investigations (STH)⁸. Excerpts of that report are included in this section. Specific resource locations are omitted for confidentiality.

NATIVE AMERICAN CONSULTATION

In December 2023, STH initiated project-related coordination with Middletown Rancheria of Pomo Indians Tribal Historic Preservation Officer Michael Rivera. The cultural resource field survey was conducted by Dr. White and Mr. Rivera. Culturally-sensitive locations in the area and potential resources of concern to the Tribe including possible archaeological and non-archaeological Traditional Cultural Properties (TCPs) were discussed in the field. A draft final of the report was submitted to Mr. Rivera for review and approval of results and recommendations. Mr. Rivera indicated that he will be available for additional Native American coordination for this project and will seek an agreement for tribal monitoring of all ground-disturbing activity, discussed further in the Tribal Cultural Resources section of this document.

ARCHIVAL DOCUMENT REVIEW

A project-specific document review was undertaken at the Northwest Information Center of the California Historic Resources Information System (NWIC; File #23-0824). Document review identified no previous professional investigations within a half-mile radius of the project area and no previously recorded archaeological sites within the footprint. Ethnographic and historical research identified no recorded traditional cultural properties and no historic-era features within the project footprint.

FIELD WORK

Field work took place December 15, 2023, and was conducted by Dr. White and Mr. Rivera. The entire project area was covered, and all survey followed an intensive survey strategy consisting of pedestrian transects spaced between 3 and 6 meters apart (10–20 feet). The entire project area was characterized by high-visibility with recently-plowed bare earth and scraped areas. After completion of the pedestrian survey, the author excavated nine augers in APN# 049-021-22, using a 4-inch ASM hand-driven auger dug in 4-inch (10-centimeter) increments to maximum depths of between 48 and 72 inches (120–183 centimeters). Auger spoils were piled in order by depth from shallow to deep and checked thoroughly for presence/absence of subsurface cultural materials.

SOILS

The project area is situated on an elevated Copsy Creek floodplain with soils classified as Kilaga Series Loamy Bottomland, dominated by alluvial products and associated with older terrace and stable flood- plain landforms (CalSoil 2023). Auger probes in the project area found profiles consistent with the Kilaga Series Official Soil Description (OSD) (USDA 2023):

⁸ Cultural Resource Investigation of the Proposed Lower Lake County Waterworks District Pump Plant Upgrade Project, APN#S 049-011-05, 049-011-06, and 049-021-22. Gregory G. White, PhD, RPA, Principal Investigator, Sub-Terra Heritage Resource Investigations. Draft Report. February 12, 2024. Note: the report will be finalized upon concurrence with the Middletown Rancheria of Pomo Indians.

- Ap Horizon: Friable loam (42% sand). Depth 0 to 10 inches, previously disturbed (plowed) friable, dark reddish brown (7.5YR 5/6) silty clay.
- A Horizon: Depth 10 to 19 inches, dark brown (7.5YR 5/6) heavy loam, dark reddish brown (7.5YR 5/6) silty clay.
- Bt1/2 Horizon: Depth 19 to 56 inches, reddish brown (5YR 4/4) clay matrix, prismatic structure.
- BCt Horizon: Durapan (45% clay), depth 56 to 83 inches, reddish brown (5YR 4/4) sandy clay loam, very hard with moderate medium angular blocky structure.

The Kilaga Series soils' shallow depth of shift from dominant sand to dominant clay and complex B horizon structure indicates that the landform aggraded slowly and was stable over a long period of time. Prior experience in the area and geoarchaeological and radiocarbon studies nearby (see Meyer 2002; Waters 2002; White 2002) suggest that the Kilaga Series Durapan Horizon (56 to 83 inches deep) is terminal Pleistocene in age and overlying strata are a product of gradual, in-place Holocene development. Two conclusions can be derived here: (1) Because this is a stable, elevated landform adjacent to a perennial stream (Copsey Creek) it can be considered highly-sensitivity for prehistoric Native American occupation deposits; and, (2) archaeological deposits associated with this soil type have the potential to range in age from the historic-era to the terminal Pleistocene, circa 14,000 years old.

Analysis

a. **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

On March 27, 2023, the Northwest Information Center (NWIC) completed an in-house document review (File #W22-1268) covering reports and records on-file for a 0.5-mile radius around the project area. In March 2023, supplementary research was also conducted in the library on-file at the offices of STH, including published and unpublished records of archaeological investigations, ethnographic studies, and historical documents, plats, and maps. No records were found on previous investigations in the area, and there are no previously recorded archaeological sites in the project area. The most up-to-date regional prehistory appears in Hildebrandt (2007). Lower Lake prehistory and historical linguistics is synthesized by White (ed. 2002) based on the results of extensive excavation of prehistoric Lake Miwok and Southeastern Pomo village sites just west of the project area.

The archaeological field study identified three cultural resources. Two resources were determined to not be significant or eligible for the CRHR. One resource was determined to be eligible for the CRHR. Information regarding this site and its location is confidential. The District is engaged in government-to-government consultation with the Middletown Rancheria to determine appropriate avoidance and mitigation measures. Please see the Tribal Cultural Resources section for additional information.

In addition to the known site, there is always the possibility of incidental discovery of historical resources during construction. In the event resources are discovered, mitigation measure CR1 would reduce such impact to less than significant.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The archaeological field study identified three cultural resources. Two resources were determined to not be significant or eligible for the California Register of Historic Resources (CRHR). One resource was determined to be eligible the CRHR. Information regarding this site and its location is confidential. The District is engaged in government-to-government consultation with the Middletown Rancheria to determine appropriate avoidance and mitigation measures. Please see the Tribal Cultural Resources section for additional information.

In addition to the known site, there is always the possibility of accidental discovery of archaeological resources during construction. In the event resources are discovered, mitigation measure CR1 would reduce such impact to less than significant.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

There are no known human remains in the project area. However, the remote possibility exists that human remains could be discovered during construction. In such an event, Mitigation Measure CR2 would reduce such impact to a less than significant level.

Cumulative Impacts

There are no adverse cumulative environmental impacts to cultural resources resulting from implementation of the proposed project.

Mitigation Measures

CR1

The project plans and specifications shall provide that in the event prehistoric-era or historic-era archaeological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. Prehistoric-era archaeological site indicators could include chipped chert and obsidian tools and tool manufacture waste flakes, grinding implements such as mortars and pestles, and locally darkened soil containing the previously mentioned items as well as fire altered stone and dietary debris such as bone and shellfish fragments. Historic-era archaeological site indicators could include items of ceramic, glass and metal, and features such as structural ruins, wells and pits containing such artifacts. After cessation of excavation, the contractor shall immediately contact the District. The District shall contact a qualified professional archaeologist immediately after the find. Such archaeologist shall conduct an evaluation of significance of the site, and assess the necessity for mitigation and contact local Native American tribes, as appropriate. The contractor shall not resume construction activities until authorization to proceed is received from the District.

CR2

If human remains are encountered during grading, excavation or trenching, all construction activity shall cease and the contractor shall immediately contact the District and the Lake County Coroner's Office. If the remains are determined by the Coroner's Office to be of Native American origin, the Native American

Heritage Commission shall be contacted and the procedures outlined in CEQA §15064.5 (d) and (e) shall be implemented by the District or its designee.

VI ENERGY

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The California Energy Commission (Energy Commission) was charged with developing the states Renewable Energy Program in 1998, following deregulation of electric utilities. The Energy Commission provides a brief history of its actions with regard to the Renewable Energy Program:

In 2002, California established its Renewables Portfolio Standard program, with the goal of increasing the percentage of renewable energy in the state’s electricity mix to 20 percent by 2017. The California Energy Commission’s (CEC’s) 2003 Integrated Energy Policy Report (IEPR) recommended accelerating that goal to 2010, and the 2004 IEPR Update urged increasing the target to 33 percent by 2020. Former Governor Arnold Schwarzenegger, the CEC, and the California Public Utilities Commission (CPUC) endorsed this enhanced goal for the state as a whole. Achieving these renewable energy goals became even more important with the enactment of Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. This legislation sets aggressive GHG reduction goals for the state, and its achievements will depend, in part, on the success of renewable energy programs.

Senate Bill X1-2 was signed by former Governor Edmund G. Brown Jr. in April 2011 to codify the ambitious 33 percent renewable energy by 2020 goal for all California utilities, including publicly owned utilities (POUs) that had been setting their own renewable targets.

In 2015, former Governor Brown extended the renewable procurement requirement by signing Senate Bill 350, which requires 50 percent renewables by 2030. In 2018, former Governor Brown signed Senate Bill 100, increasing the 2030 renewable procurement requirement to 60 percent and implementing a 100 percent zero-carbon goal for 2045. All the while, the majority of utilities and the electricity market continue to meet and exceed these goals and expectations.

In the first half of 2019, California met the Million Solar Roofs goal established in Senate Bill 1 and may have met the 50 percent PV installation goal for new homes two years early.

California has ambitious goals of reducing GHG emissions 40 percent below 1990 levels by 2030 and 80 percent by 2050, and advancing the use and availability of renewable energy is critical to achieving those goals. Therefore, the state has pursued a suite of policies and programs aimed at advancing renewable energy and helping ensure all Californians, including low-income and disadvantaged communities, benefit from this transition.”⁹

These goals were accelerated in 2016 with passage of SB 32 requiring lowering greenhouse gas emissions to 40 percent below 1990 levels by 2030. Further, “In 2018, Senate Bill 100...set a planning target of 100 percent zero-carbon electricity resources by 2045 and increased the 2030 renewables target from 50 percent to 60 percent. On the same day of signing SB 100, then-Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter. The executive order covers all sectors of the economy¹⁰.”

Today, California’s energy policies are intertwined with goals of reducing greenhouse gases. The Energy Commission produces the biennial Integrated Energy Policy Report. The report contains an integrated assessment of major energy trends and issues facing California’s electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state’s economy; and protect public health and safety. The most recent report was released in 2021¹¹.

CURRENT ENERGY USAGE AND SOURCES

California uses the least electricity of any state with a 2020 (most recent electricity California Energy Commission date) usage of 7,069 kWh per capita¹². The census states that Lake County had an estimated population of 68,163 in 2020¹³ and the California Energy Commission indicates the Lake County used a total (residential and non-residential) of 458.674666 gigawatt hours (GWh) of electricity in 2020¹⁴ for a per capita use of approximately 6,729 kWh, somewhat below the state average.

Lake County is provided electricity by PG&E. As of 2020, PG&E supplied 30.6 percent of its electricity from renewable resources under the California Renewables Portfolio Standard. PG&E intends to supply 50 percent renewable electricity by 2030, consistent with California’s goals. Additionally, in 2020, 42.8 percent of PG&E electricity was nuclear power and 10.1 percent was hydroelectric, for a total of 83.5 percent greenhouse gas free electricity¹⁵. In contrast, the overall power mix in California is 34.5 percent renewable and 59 percent greenhouse gas free electricity in 2020¹⁶.

⁹ https://www.energy.ca.gov/sites/default/files/2019-12/renewable_appendix_ADA.pdf

¹⁰ Ibid.

¹¹ <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report>

¹² https://www.energy.ca.gov/almanac/electricity_data/us_per_capita_electricity.html

¹³ <https://www.census.gov/quickfacts/lakecountycalifornia>

¹⁴ <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>

¹⁵ <https://www.energy.ca.gov/filebrowser/download/3882>

¹⁶ <https://www.energy.ca.gov/news/2022-02/new-data-indicates-california-remains-ahead-clean-electricity-goals>

Analysis

- a. **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Project construction would only account for a minor use of energy, primarily associated with fuels used in construction vehicles. All vehicles would be California-compliant to ensure state goals of efficiency and air quality are maintained. The new well and booster pump stations would be new facilities that would utilize modest amounts of electricity to meet existing water service demands. The storage tank would be passive and not increase energy consumption. The water mains would not require energy after installation. The project is necessary to meet water production, storage and pressure demands throughout the existing water systems and does not result in a wasteful, inefficient or unnecessary consumption of energy resources.

- b. **Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As indicated above, electricity to the project is provided by PG&E and is exceeding the state's renewable energy goals. The new well and pump station would utilize the same per capita energy as a few people to serve the existing residents on the water system. Because the project uses so little energy and that energy is supplied according to California's renewable energy policies, the project will not conflict with or obstruct the state's plan for renewable energy or energy efficiency.

Cumulative Impacts

There are no adverse cumulative environmental impacts to energy resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to energy have been identified; therefore, no mitigation is required.

VII GEOLOGY & SOILS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

REGIONAL GEOLOGY AND TOPOGRAPHY

The proposed project site is located within the Coast Ranges Geomorphic Province of California. This province is characterized by northwest trending topographic and geologic features, and it includes many separate ranges, coalescing mountain masses, and several major structural basins. The province is bounded on

the east by the Great Valley Geomorphic Province and on the west by the Pacific Ocean. The Coast Ranges region extends north into Oregon and south to the Transverse Ranges and Ventura County.

The structure of the northern Coast Ranges region is extremely complex due to continuous tectonic deformation imposed over a long period of time. The initial tectonic episode in the northern Coast Ranges was a result of the plate convergence which is believed to have begun during late Jurassic time. This process involved eastward thrusting of oceanic crust beneath the continental crust (Klamath Mountains and Sierra Nevada) and the scraping off of materials that are now accreted to the continent (northern Coast Ranges). This is a seismically active region characterized by northwest-trending faults. Topography is highly varied in the area today, ranging from nearly level to steep.

Regional geology is shown on Figure VII-1. The site is underlain by marine sedimentary rocks from the Paleocene composed of mostly well consolidated sandstone, shale and conglomerate.

SOILS IN THE PROJECT AREA

Project area soils are shown on Figure VII-2. According to the United States Department of Agriculture, Natural Resources Conservation Service mapping, Kilaga variant loam, 0 to 5 percent slopes, underlay the entire project site.

LIQUEFACTION

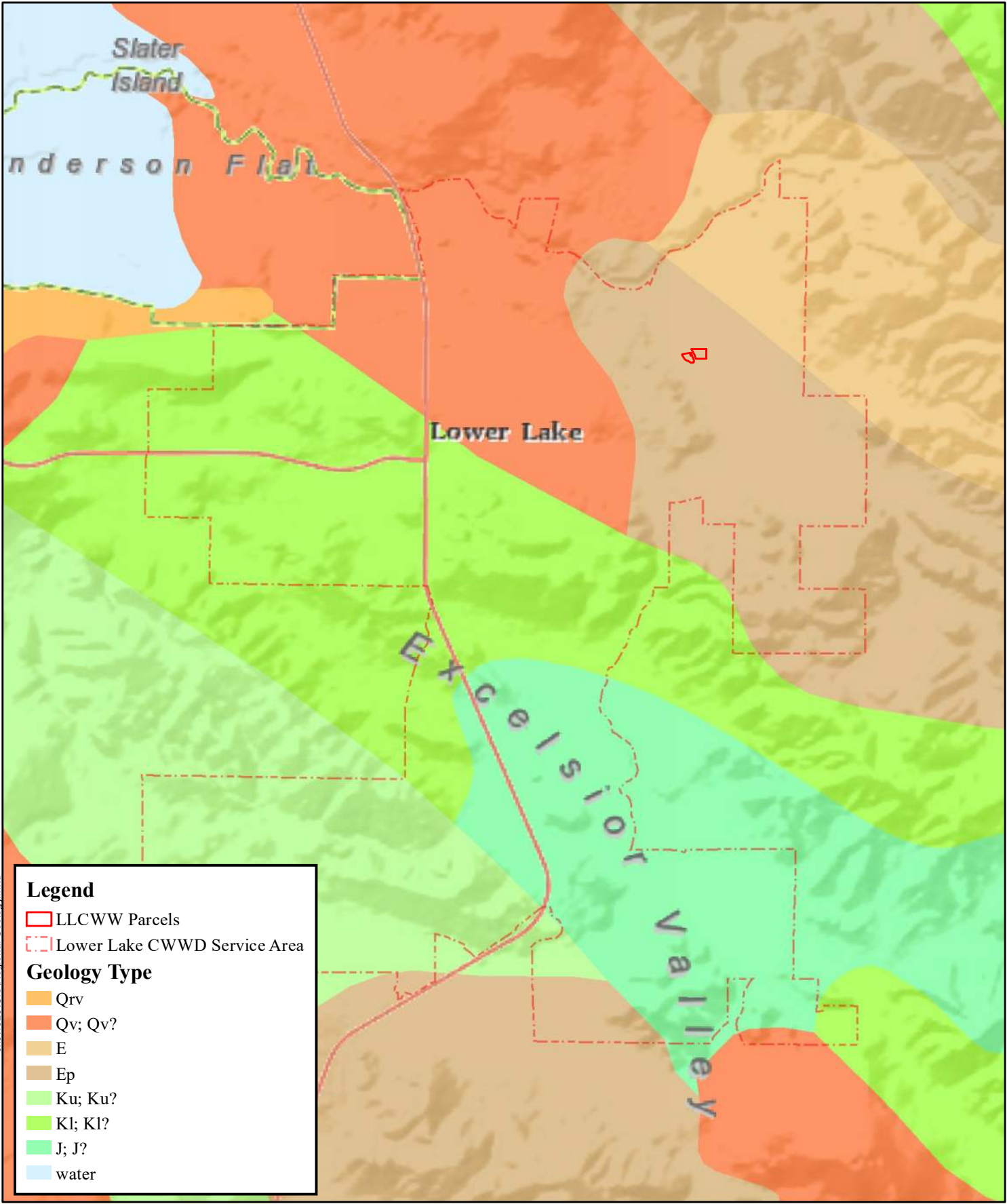
Liquefaction is the process where water is combined with unconsolidated soils, generally from ground motions and pressure, which causes the soils to behave like quicksand. Liquefaction potential is determined from a variety of factors including soil type, soil density, depth to the groundwater table, and the expected duration and intensity of ground shaking. Liquefaction is most likely to occur in deposits of water-saturated alluvium or areas of considerable artificial fill.

SEISMIC CONDITIONS

Similar to all of Lake County, the project area is within a seismically active area. The nearest faults considered to be ‘Holocene-active’ (experiencing surface rupture within about the last 11,000 years) are shown below and on Figure VII-3. Other faults in the project area are considered to be in the 700,000 to two million year old range and considered less likely to result in seismic activity. Faults with the potential to produce earthquakes are described below.

Fault	Approximate Distance to Fault (miles)	Direction to Fault
Konocti	4	West
Mayacama	20	West
Rodgers Creek	25	Southwest
W. Napa	29	South
San Andreas	45	West

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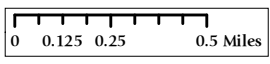
Legend

- LLCWW Parcels
- Lower Lake CWWD Service Area

Geology Type

- Qrv
- Qv; Qv?
- E
- Ep
- Ku; Ku?
- Kl; Kl?
- J; J?
- water

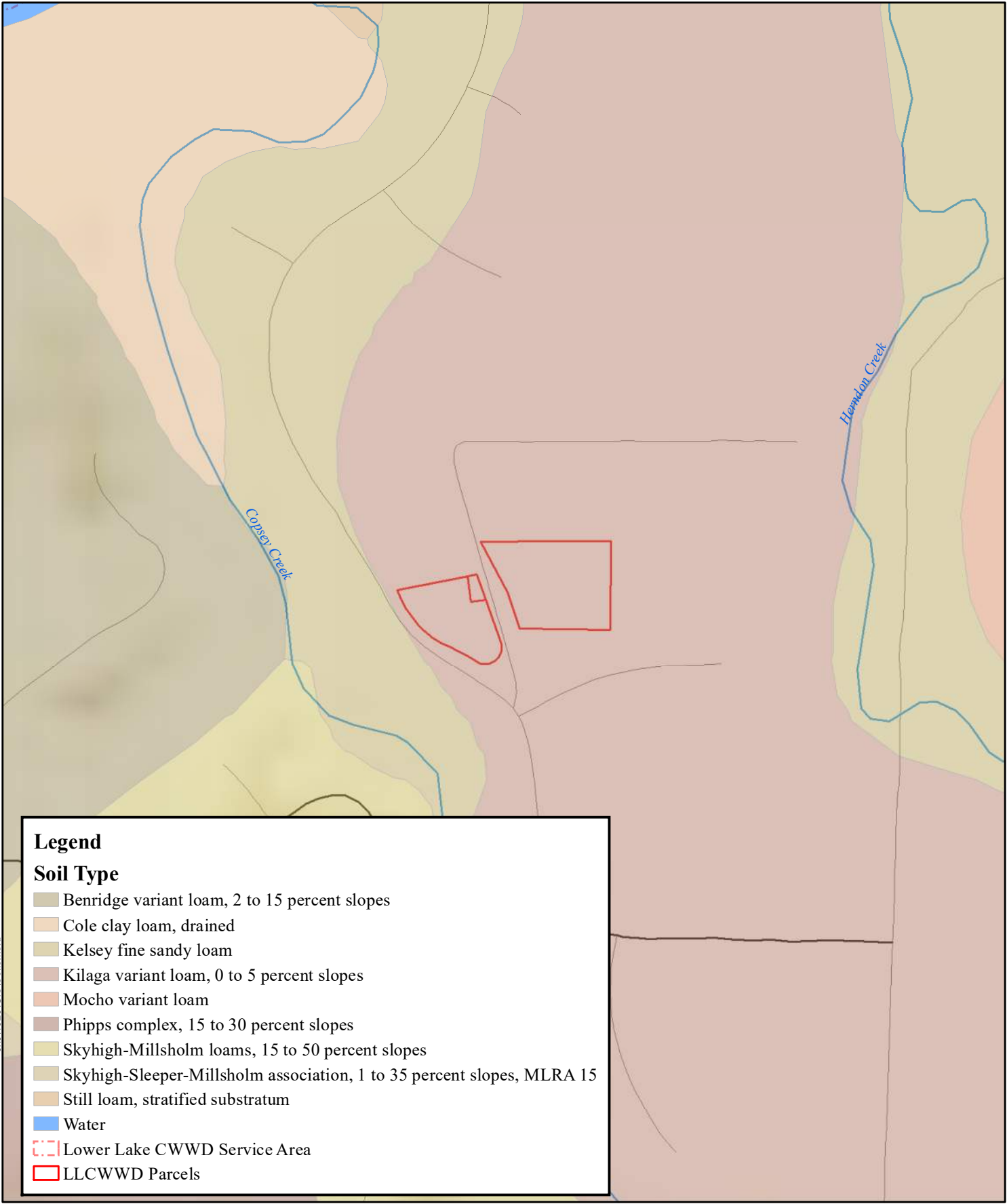
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Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US
Data Source Information:
Department of Conservation



**FIGURE VII-1
REGIONAL GEOLOGY**













**LOWER LAKE CWWD
MARCH 2024**

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Legend

Soil Type

-  Benridge variant loam, 2 to 15 percent slopes
-  Cole clay loam, drained
-  Kelsey fine sandy loam
-  Kilaga variant loam, 0 to 5 percent slopes
-  Mocho variant loam
-  Phipps complex, 15 to 30 percent slopes
-  Skyhigh-Millsholm loams, 15 to 50 percent slopes
-  Skyhigh-Sleeper-Millsholm association, 1 to 35 percent slopes, MLRA 15
-  Still loam, stratified substratum
-  Water
-  Lower Lake CWWD Service Area
-  LLCWWD Parcels

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

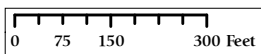
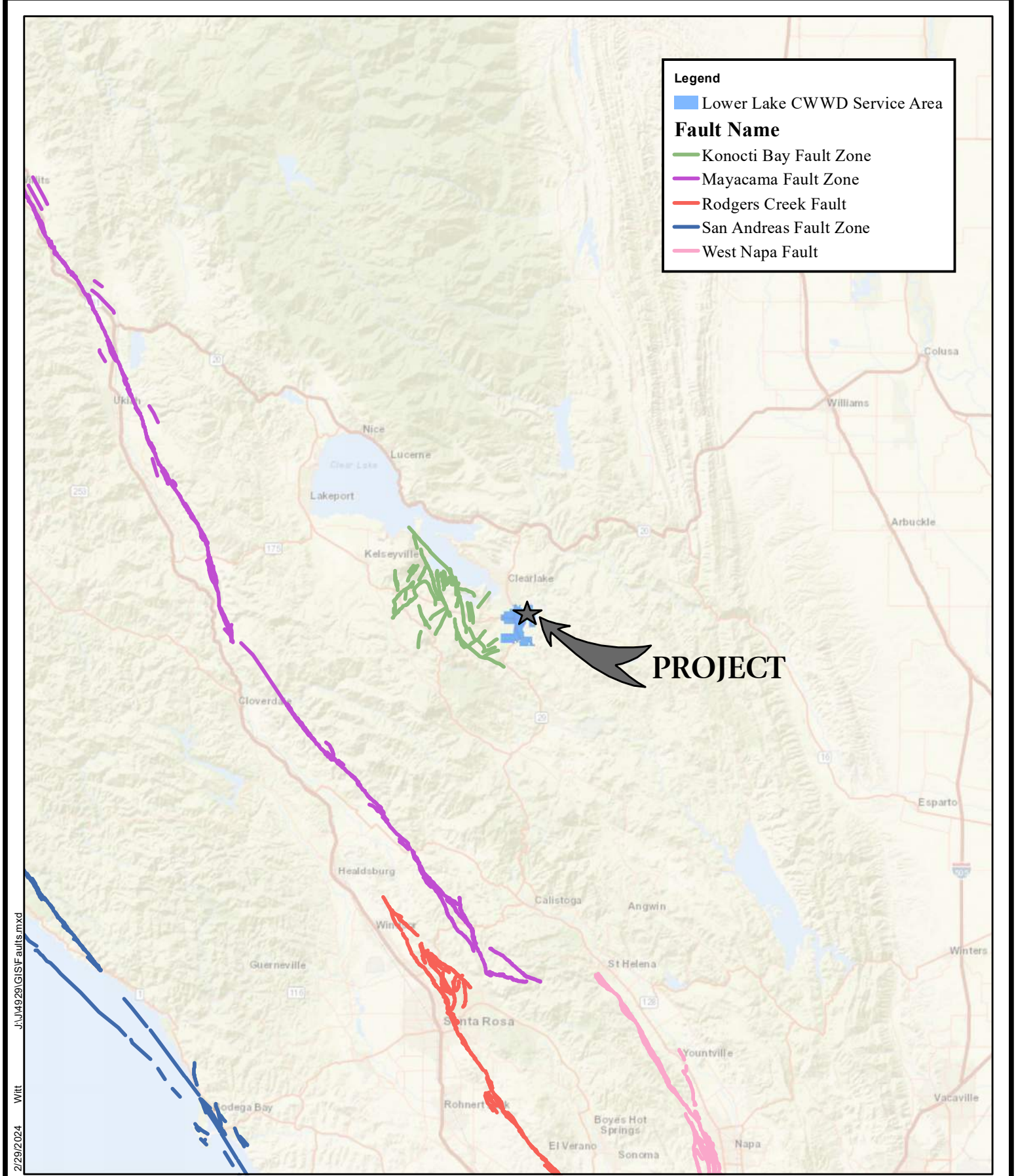


FIGURE VII-2
SOILS

LOWER LAKE CWWD
MARCH 2024



Legend

- Lower Lake CWWD Service Area

Fault Name

- Konocti Bay Fault Zone
- Mayacama Fault Zone
- Rodgers Creek Fault
- San Andreas Fault Zone
- West Napa Fault

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Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

DATA SOURCES
 USGS

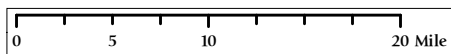


FIGURE VII-3
FAULTS

LOWER LAKE CWWD
 MARCH 2024

Throughout Lake County and entire Northern California region, ground shaking from earthquakes represents a significant geologic hazard to developments. The intensity of ground shaking will be dependent on several factors such as: 1) distance from the site to the earthquake focus; 2) depth of earthquake focus; 3) earthquake magnitude; 4) response of the underlying soil and rock; and, 5) topography and local geologic structure.

Regulatory Setting

FEDERAL REGULATIONS

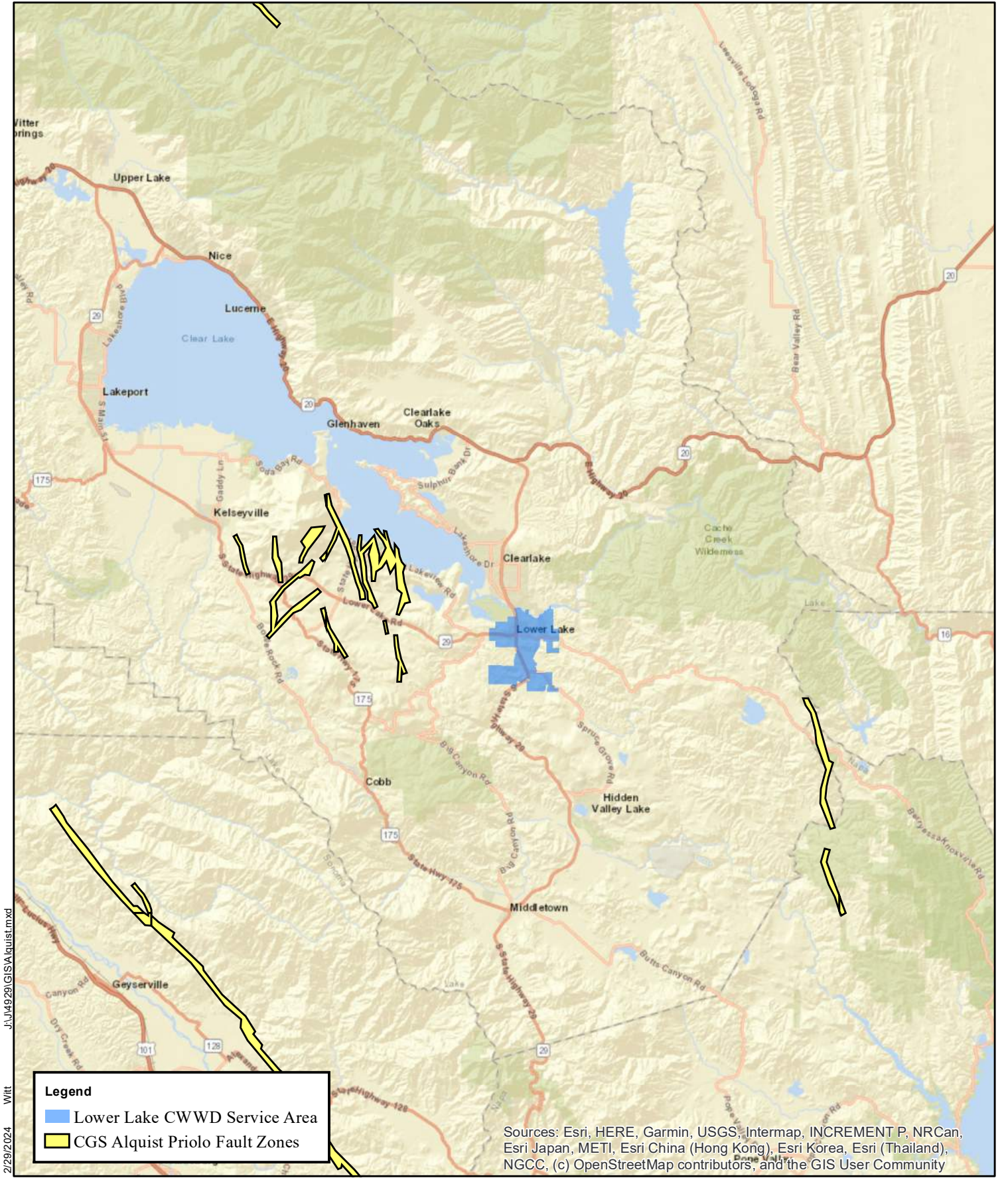
Clean Water Act 402 and National Pollutant Discharge Elimination System

The CWA is discussed in detail in the Hydrology and Water Quality section of this document. However, because CWA Section 402 is directly relevant to excavation, additional information is provided below. Amendments to the CWA in 1987 added Section 402p, which establishes a framework for regulating municipal and industrial stormwater discharges under National Pollutant Discharge Elimination System (NPDES) program. The EPA has delegated to the State Water Resources Control Board (SWRCB) the authority for the NPDES program in California, which is implemented by the state's nine regional water quality control boards. Under the NPDES Phase II Rule, construction activity disturbing one acre or more must be permitted under the state's General Construction Permit. General Construction Permit applicants are required to prepare a Notice of Intent and a Stormwater Pollution Prevention Plan (SWPPP) and implement and maintain Best Management Practices (BMPs) to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

STATE REGULATIONS

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (prior to January 1, 1994, known as the Alquist-Priolo Special Studies Zones Act – CCR, Title 14, Section 3600) sets forth the policies and criteria of the State of California in regard to building within active fault zones mapped pursuant to the Act. The Alquist-Priolo Earthquake Fault Zoning Act outlines cities' and counties' responsibilities in prohibiting the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones delineated on maps officially issued by the State Geologist. Figure VII-4 shows the project relative to the nearest mapped fault zone.



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Legend

- Lower Lake CWWD Service Area
- CGS Alquist Priolo Fault Zones

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

DATA SOURCES
 State of California

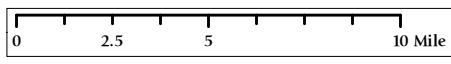


FIGURE VII-4
ALQUIST PRIOLO FAULTS

LOWER LAKE CWWD
 MARCH 2024

Seismic Hazard Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC 2690 2699.6) is intended to reduce damage resulting from earthquakes. The Seismic Hazards Mapping Act addresses earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites in Seismic Hazard Zones until appropriate site-specific geologic or geotechnical investigations have been carried out, and measures to reduce potential damage have been incorporated into the development plans.

California Building Code

The California Code of Regulations, Title 24, also known as the California Building Standard Code or the California Building Code (CBC), establishes guidance for foundation design, shear wall strength, and other structurally related concerns. The CBC modified regulations for specific conditions found in California and included a large number of more detailed and/or more restrictive regulations. For example, CBC includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. The CBC requires structures to be built to withstand ground shaking in areas of high earthquake hazards and the placement of strong motion instruments in larger buildings to monitor and record the response of the structure and the site of the seismic activity. Compliance with CBC regulations ensures the adequate design and construction of building foundations to resist soil movement. In addition, the CBC also contains drainage requirements in order to control surface drainage and to reduce seasonal fluctuations in soil moisture content.

Analysis

- a. **Would the project directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:**
 - a.i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

The project area is not located within an Alquist-Priolo Zone, as shown on Figure VII-4. None of the project components are intended for human occupancy. The project would be required to implement California Building Code Seismic Design Category Requirements standards into the project design for applicable features to minimize hazards associated with potential fault rupture, ground shaking, and liquefaction. Based on incorporation of appropriate geotechnical design recommendations and engineering standards, the risk to the project from fault rupture is considered to be less than significant.

a.ii. Strong seismic ground shaking?

Similar to all of Lake County, the project location is subject to strong seismic ground shaking. The Konocti Fault system is approximately four miles west of the project area. The Mayacama Fault is located approximately 20 miles west of the project area. The Rodgers Creek Fault is located approximately 25 miles southeast and the San Andreas Fault is located approximately 45 miles west of the project.

As indicated in a.i.) above, the project would be designed and constructed in strict adherence with current standards for earthquake-resistant construction, as is standard practice. Risk to the project is considered to be less than significant.

a.iii. Seismic-related ground failure, including liquefaction?

As indicated in a.ii.) above, seismic ground shaking could occur in the project area. The project is not located in an area subject to liquefaction. Any risks of ground failure would be remediated, as indicated in a.i.) above.

a.iv. Landslides?

The project would primarily be constructed within areas with existing infrastructure and residential development. Landslides are not evident at current project locations and the project would not increase the risk of landslides.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The proposed project occurs within an existing developed water infrastructure site and the adjacent disturbed vacant lot. Stormwater drainage in the area primarily consists of overland flow over the ground and roadway surfaces that concentrate in man-made drainage elements such as roadside gutters and drainage ditches. Surfaces would be restored to existing conditions once construction is complete to ensure there is no long-term erosion.

Construction of the overall project would involve minor grading for the Phase II approximately 200 square-foot building and approximately 30-foot diameter tank. Drilling the well and installing connecting water main would also include a small amount of ground disturbance. The overall area of ground disturbance for both phases is anticipated to be under 7,000 square feet.

The project's small construction footprint results in it being exempt from the local Standard Urban Stormwater Mitigation Plan (SUSMP) and Low Impact Design standards (LID) that typically regulate erosion on project sites. Additionally, the project's total disturbance is well under the one-acre threshold that is required to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB). While the project is exempt or under trigger thresholds for standard procedures for larger development projects, soil erosion could still occur. To ensure erosion is minimized to the extent practicable and does not enter waterways, an erosion control plan would be prepared. Mitigation Measure GS1 requires that those actions occur and would reduce any potential soil erosion impact to a less than significant level.

- c. **Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The project area supports the existing water treatment facility services. Appropriate design according to professional standards and regulations contained in the most recent edition of the California Building Code would ensure that any risk from on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is less than significant.

- d. **Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Appropriate design according to professional standards and regulations contained in the most recent edition of the California Building Code would ensure that any risk from expansive soils is less than significant.

- e. **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

Wastewater service in the project area is provided by individual septic systems. No new wastewater would be generated by the proposed project.

- f. **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

There are no known paleontological resources or unique geologic features in the project area. Mitigation Measure GS2 is included to preserve any such features discovered during construction and reduces any potential impact to less than significant.

Cumulative Impacts

There are no adverse cumulative environmental impacts to geology and soils resulting from implementation of the proposed project.

Mitigation Measures

GS1

The District shall prepare an erosion control plan for the project. Appropriate BMPs will be implemented by the project to minimize construction-related erosion and runoff. BMPs include, but are not limited to:

- Schedule construction activities during dry weather. Keep grading operations to a minimum during the rainy season (October 15 through April 15).
- Protect and establish vegetation.
- Stabilize construction entrances and exits to prevent tracking onto roadways.

- Protect exposed slopes from erosion through preventative measures. Cover the slopes to avoid contact with storm water by hydroseeding, applying mulch or using plastic sheeting.
- Install straw wattles and silt fences on contour to prevent concentrated flow. Straw wattles should be buried 3 to 4 inches into the soil, staked every 4 feet, and limited to use on slopes that are no steeper than 3 units horizontal to 1 unit vertical. Silt fences should be trenched 6 inches by 6 inches into the soil, staked every 6 feet, and placed 2 to 5 feet from any toe of slope.
- Designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains. Maintain washout area and dispose of concrete waste on a regular basis.
- Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids. Use oil pans under stationary vehicles.
- Protect drainage inlets from receiving polluted storm water through the use of filters such as fabrics, gravel bags or straw wattles.
- Check the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.
- Inspect all BMPs before and after a storm event. Maintain BMPs on a regular basis and replace as necessary.

GS2

The project plans and specifications shall provide that in the event paleontological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. After cessation of excavation, the contractor shall immediately contact the District. The District shall contact a qualified professional geologist or paleontologist immediately after the find. Such consultant shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The contractor shall not resume construction activities until authorization to proceed is received from the District.

VIII GREENHOUSE GAS EMISSIONS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

To fully understand global climate change it is important to recognize the naturally occurring “greenhouse effect” and to define the greenhouse gases (GHG) that contribute to this phenomenon. The temperature on Earth is regulated by this “greenhouse effect,” which is so named because the Earth’s atmosphere acts like a greenhouse, warming the planet in much the same way that an ordinary greenhouse warms the air inside its glass walls. Like glass, the gases in the atmosphere let in light yet prevent heat from escaping.

Greenhouse gases are naturally occurring gases such as water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) that absorb heat radiated from the Earth’s surface. Greenhouse gases are transparent to certain wavelengths of the Sun’s radiant energy, allowing them to penetrate deep into the atmosphere or all the way to Earth’s surface. Clouds, ice caps, and particles in the air reflect about 30 percent of this radiation, but oceans and land masses absorb the rest (70 percent of the radiation received from the Sun) before releasing it back toward space as infrared radiation. The greenhouse gases and clouds effectively prevent some of the infrared radiation from escaping; they trap the heat near the Earth’s surface where it warms the lower atmosphere.

In addition to natural sources, human activities are exerting a major and growing influence on climate by changing the composition of the atmosphere and by modifying the land surface. Particularly, the increased consumption of fossil fuels (natural gas, coal, gasoline, etc.) has substantially increased atmospheric levels of greenhouse gases. Measured atmospheric levels of certain greenhouse gases such as CO₂, NH₄, and N₂O have risen substantially in recent decades. This increase in atmospheric levels of greenhouse gases unnaturally enhances the “greenhouse effect” by trapping more infrared radiation as it rebounds from the Earth’s surface and thus trapping more heat near the Earth’s surface.

California Implications

According to the Air Resources Board’s 2016 California GHG Emissions Inventory, in 2014, total California GHG emissions were 441.5 million metric tons of CO₂ equivalent (MMTCO₂e), a decrease of 2.8 MMTCO₂e compared to 2013. This represents an overall decrease of 9.4 percent since peak levels in 2004. During the 2000 to 2014 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 13.9 tons per person to 11.4 tons per person in 2014; an 18 percent decrease¹⁷. State regulations

¹⁷ https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf

have begun lowering GHG California's contribution to global GHG levels but managing GHG emissions remains an ongoing priority in California.

State Regulations

CLIMATE CHANGE REGULATORY FRAMEWORK

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act, which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required the California Air Resources Board (ARB) to develop a Scoping Plan, adopted in 2008, that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. In 2016, the Legislature passed SB 32, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels by 2030. The Scoping Plan was updated in 2017. In 2018, Senate Bill 100 set a planning target of 100 percent zero-carbon electricity resources by 2045 and increased the 2030 renewables target from 50 percent to 60 percent. Executive Order B-55-18 set a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter. The Scoping Plan recognizes that local GHG reduction commitments and climate action plans are essential to the state meeting its targeted emissions reductions.

California's energy policies are intertwined with goals of reducing greenhouse gases. These goals were accelerated in 2016 with passage of SB 32 requiring lowering greenhouse gas emissions to 40 percent below 1990 levels by 2030. Further, "In 2018, Senate Bill 100...set a planning target of 100 percent zero-carbon electricity resources by 2045 and increased the 2030 renewables target from 50 percent to 60 percent. On the same day of signing SB 100, then-Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to maintain net negative emissions thereafter. The executive order covers all sectors of the economy... Executive Order B-55-18 follows the spirit of what is required at a global scale to achieve the climate goals of the Paris Agreement, in which signatory nations worldwide agree to sufficiently reduce GHG emissions to avoid catastrophic climate change. This is also consistent with a special report by the Intergovernmental Panel on Climate Change, which found that to avoid catastrophic climate change, global carbon dioxide emissions must decline by about 45 percent below 2010 levels by 2030 and reach net zero by about 2050¹⁸."

LOCAL REGULATIONS

ARB works with 35 air pollution districts in California to enforce air pollution regulations. The LCAQMD enforces air quality regulations in Lake County. More metropolitan air pollution districts, cities and counties have adopted Local Climate Action Plans consistent with ARB Scoping Plan goals. Due to the rural nature of the project area, the County of Lake has not developed a Climate Action Plan.

Because the LCAQMD has not developed GHG regulations or a Climate Action Plan, it has not identified a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. Similarly, the county has not prepared a climate action plan so there is no established local threshold of significance for GHGs. The adjacent Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted GHG screening thresholds 2018 that are contained in the

¹⁸ Ibid.

SMAQMD's CEQA Guide¹⁹. For land development and construction projects, that threshold has been established as 1,100 metric tons per (MT/yr) year for construction and operational phases. Stationary sources (projects that don't involve transportation impacts) have been determined to have an operational threshold of 10,000 MT/yr. While neither the LCAQMD nor Lake County has adopted these thresholds, they are a useful guideline for assessing this project's potential impacts.

Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The SMAQMD does not have screening criteria for municipal water projects. However, under SMAQMD's 1,100 MT/yr threshold, various examples of projects that would not result in significant GHG emissions are provided. For example, 56 residential units, 85 apartment units, a 57,000 square foot elementary school or a 10,000 square foot fast foot restaurant would be considered under that threshold. The proposed project would have a footprint under 7,000 square feet and not increase traffic in any way. It is smaller in scale than any of the provided screening criteria and is therefore considered to be less than significant. Because the project does not induce growth, operational emissions would be essentially unchanged.

b. Would the project Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Lake County has not adopted a Climate Action Plan. Because the project does not exceed the SMAQMD's construction threshold of 1,100 MT/yr and operational emissions would be essentially unchanged, the project would not impede implementation of a local climate action plan, should one be developed.

Cumulative Impacts

As indicated in a.) above, the project would result in short-term emission of GHGs associated with project construction. Construction-related emissions are not considered to be cumulatively considerable based on the limited nature of the construction project and emissions expected to below the 1,100 MT/yr threshold.

Mitigation Measures

No adverse environmental impacts to greenhouse gas emissions have been identified; therefore, no mitigation is required.

¹⁹ <https://www.airquality.org/LandUseTransportation/Documents/Ch4+Ch6OperationalScreening4-2018.pdf>

IX HAZARDS & HAZARDOUS MATERIALS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

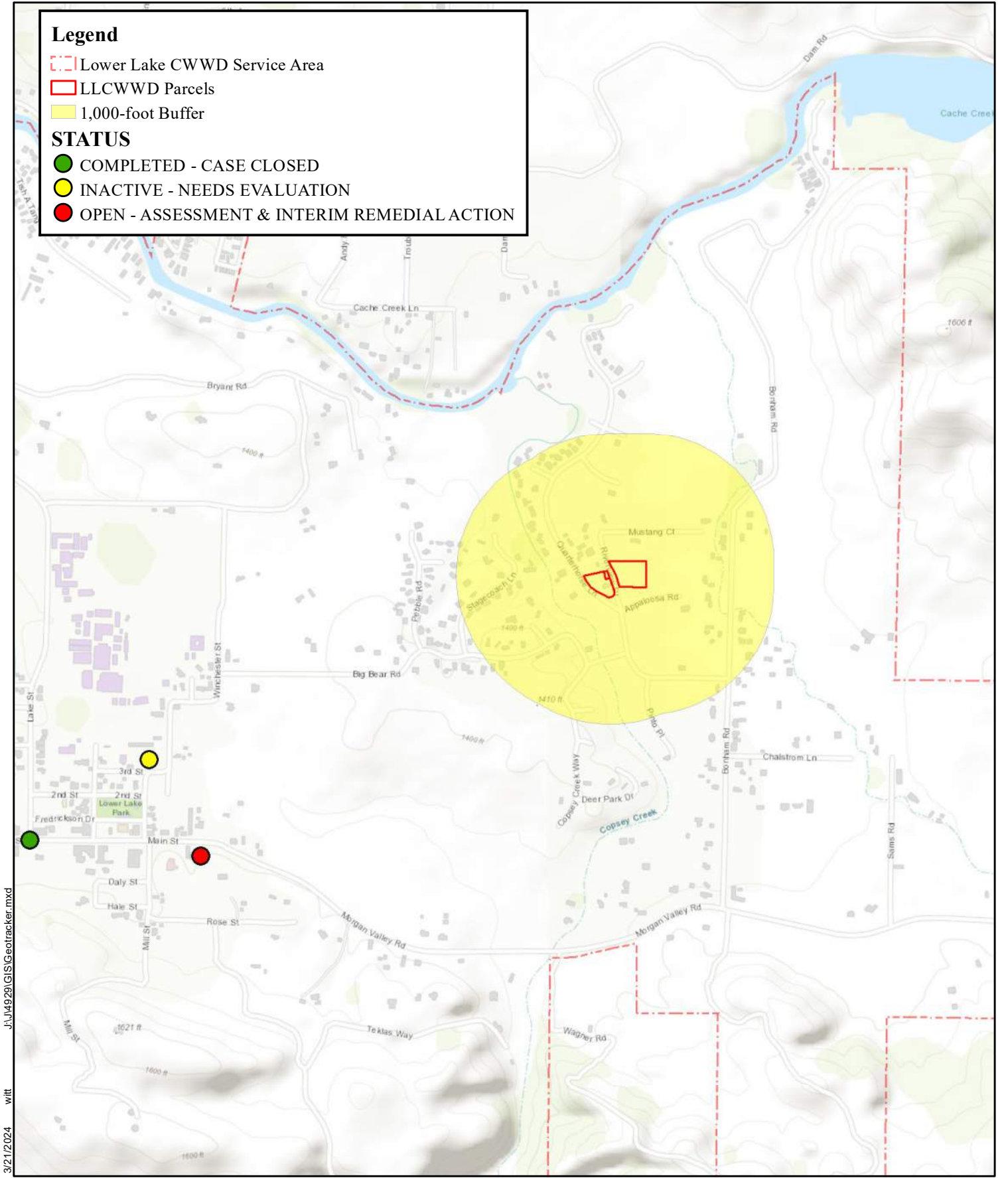
There are no known hazardous materials sites within 1,000 feet of the project sites. Sites listed on California's Geotracker system are shown on Figure IX-1. Implementation of the project would require the use of small quantities of hazardous materials, including petroleum and other chemicals, to operate and maintain construction equipment.

Legend

- Lower Lake CWWD Service Area
- LLCWWD Parcels
- 1,000-foot Buffer

STATUS

- COMPLETED - CASE CLOSED
- INACTIVE - NEEDS EVALUATION
- OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION



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Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US
Data Source Information:
Hazardous Materials: Water Resources Control Board GeoTracker (2109)

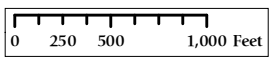


FIGURE IX-1
HAZARDOUS MATERIALS SITES
LOWER LAKE CWWD
MARCH 2024

REGULATORY SETTING

Federal Regulations

Hazardous materials in the project area are subject to applicable federal regulations, including the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act. Other applicable federal regulations are contained primarily in CFR Titles 29, 40, and 49.

State Regulations

California regulations are as stringent as or more stringent than federal regulations. The EPA has granted the State of California primacy oversight responsibility for administering and enforcing hazardous waste management programs. State regulations require planning and management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human and environmental health.

Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project is a municipal water system improvement project to provide additional source capacity (to meet regulations and future drought conditions) and storage capacity and is not associated with hazardous materials. Construction of the proposed project would include the use and short-term storage of hazardous materials. These materials include, but are not limited to, lubricants, adhesives, paints, asphalt, fuel, and toxic solvents. The proposed project is required to comply with federal, state, and local regulations regarding the storage, handling, disposal, and cleanup of hazardous materials. No routine transport, use or disposal of hazardous materials is associated with this project. Disinfection of drinking water already occurs at the site and the District has protocol in place for both handling, using and cleanup of associated disinfection materials, currently and expected to be chlorine. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

As indicated above, the project would not introduce new long-term hazardous materials or hazardous materials handling. There is the potential for a fuel/oil spill during construction from construction vehicles and equipment. Mitigation Measure HM1 would reduce such impact to a less than significant level.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project would not result in emissions or handling of hazardous materials within one quarter mile of an existing or proposed school. The nearest school is Lower Lake High School, approximately 0.5 mile

west of the project. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials that would have any impact to the school.

- d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

The proposed project is not in the vicinity of hazardous materials sites listed by the State Water Resources Control Board GeoTracker system as shown on Figure IX-1. There are no listed sites within 1,000 feet of any of the proposed project components. There is the possibility with any construction project that contaminated soils would be found during construction. In that event, Mitigation Measure HM1 requires the contractor to cease work and contact the District and the Regional Board to develop a plan to dispose of the soils and ensure worker safety and protection of the environment.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

The nearest public use airport, Lampson Field, is located between the communities of Kelseyville and Lakeport and is approximately 15 linear miles northwest of the project area. The project is not located within Lampson Field's airport land use plan area. Therefore, there would be no impact.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The Lake County Emergency Response Plan facilitates response by the Lake County Department of Health Services when medical and health services are required as a result of catastrophic events. The primary threats to Lake County in the project area include earthquakes and aftershocks, and wildfires. An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. The District shall require that the contractor develop a traffic management plan that ensures the existing roadway system within the project area shall be kept accessible to residents and to all first responder units in the case of a wildland fire or earthquake event by the incorporation of half-width improvements and traffic control utilization. Additionally, encroachment permits required from the County would ensure appropriate traffic control and emergency access are maintained. As such, this impact would be less than significant.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

The project would improve water supply and storage for the existing water system. Once completed, the project would primarily be underground or on a site owned by the District and would not increase the risk of wildland fires. Above ground construction would meet existing fire and building codes. Implementation of the project would increase the community's ability to respond to fires by increasing emergency water supplies available to within the system.

Cumulative Impacts

There are no adverse cumulative environmental impacts to or from hazards/hazardous materials resulting from implementation of the proposed project.

Mitigation Measures

HM1

The contractor shall be required to follow the provisions of § 5163 through 5167 of the General Industry Safety Orders (California Code of Regulations, Title 8) to protect the project area from being contaminated by accidental release of any hazardous materials.

In general, the Contractor shall maintain awareness of potential signs of soil and groundwater contamination throughout the project limits and shall notify the District immediately upon discovery of any potential soil or groundwater contamination.

If hazardous materials are encountered during construction or occur as a result of an accidental spill, the contractor shall halt construction immediately, notify the District, and implement remediation in accordance with the project specifications and applicable requirements of the Regional Board. Disposal of all hazardous materials shall be in compliance with current California hazardous waste disposal laws.

X HYDROLOGY & WATER QUALITY

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in a substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. impede or redirect flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

SURFACE WATER

The proposed project site is located within the Sacramento River Basin. This basin covers approximately 27,210 square miles and includes the entire area drained by the Sacramento River, including all watersheds tributary to the Sacramento River north of the Cosumnes River watershed. The basin also includes the closed basin of Goose Lake and the drainage sub-basins of Cache and Putah creeks. The principal streams are the Sacramento River and its larger tributaries, the Pit, Feather, Yuba, Bear, and American rivers to the east, and

Cottonwood, Stony, Cache, and Putah creeks to the west. Major reservoirs and lakes include Shasta, Oroville, Folsom, Clear Lake, and Lake Berryessa. Project area surface waters are shown on Figure X-1. Copsy Creek is approximately 250-300 feet west of the existing treatment plant parcel and Herndon Creek is approximately 600 feet east of the proposed well site parcel.

There are no designated wild or scenic rivers in the immediate project area. Cache Creek is designated as a wild or scenic river approximately two miles downstream of the project, as shown on Figure X-2.

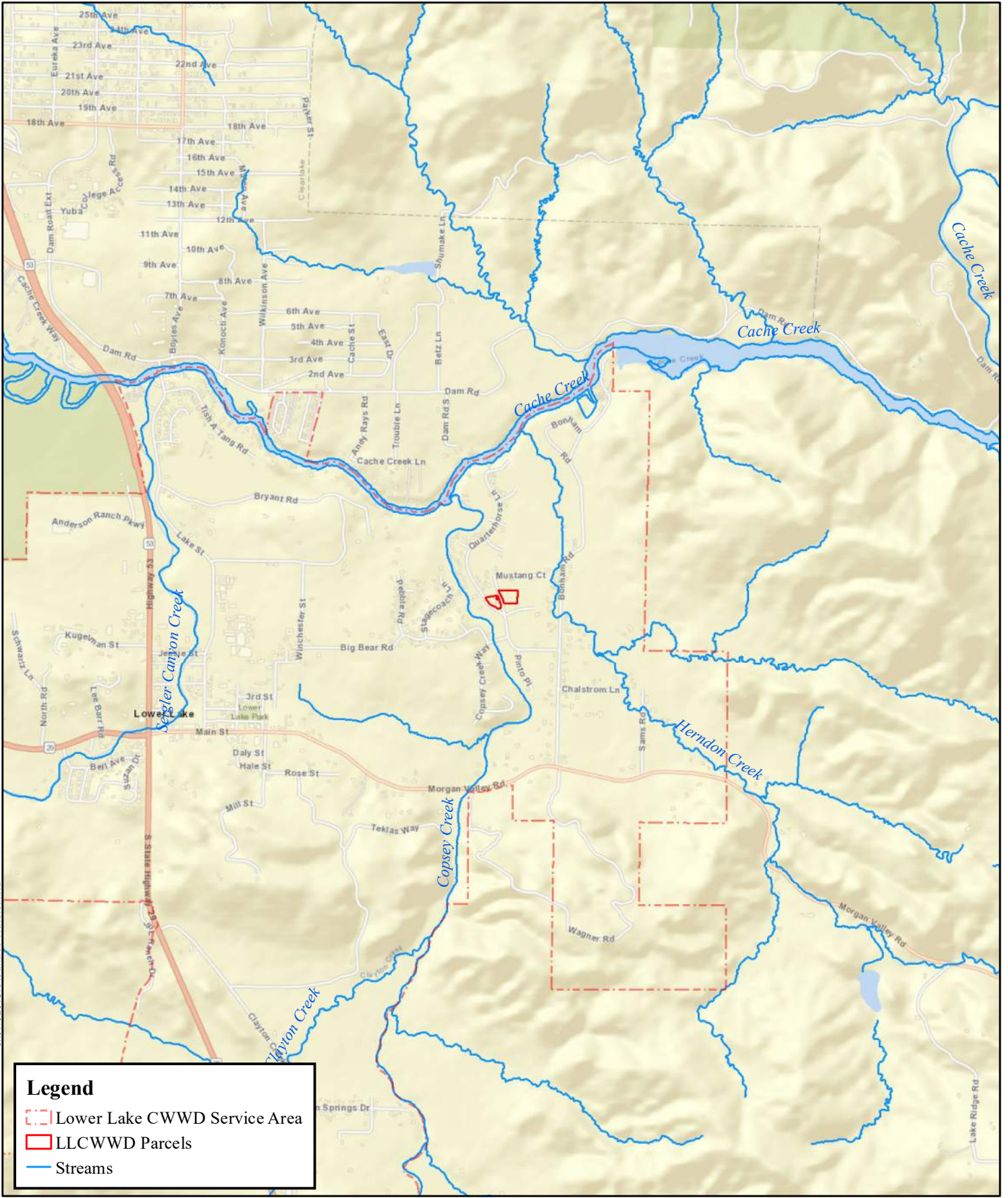
GROUNDWATER RESOURCES

The District's water supply is from wells. As shown on Figure X-3, the project is located above the Lower Lake Valley aquifer.

FLOODING

A portion of the parcel where the proposed project would be constructed is within the 100-year flood plain and 500-year flood plain associated with easterly Herndon Creek, as shown on Figure X-4. The remainder of the project is not located within designated flooding areas.

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Legend

- Lower Lake CWWD Service Area
- LLCWWD Parcels
- Streams

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

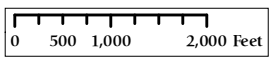
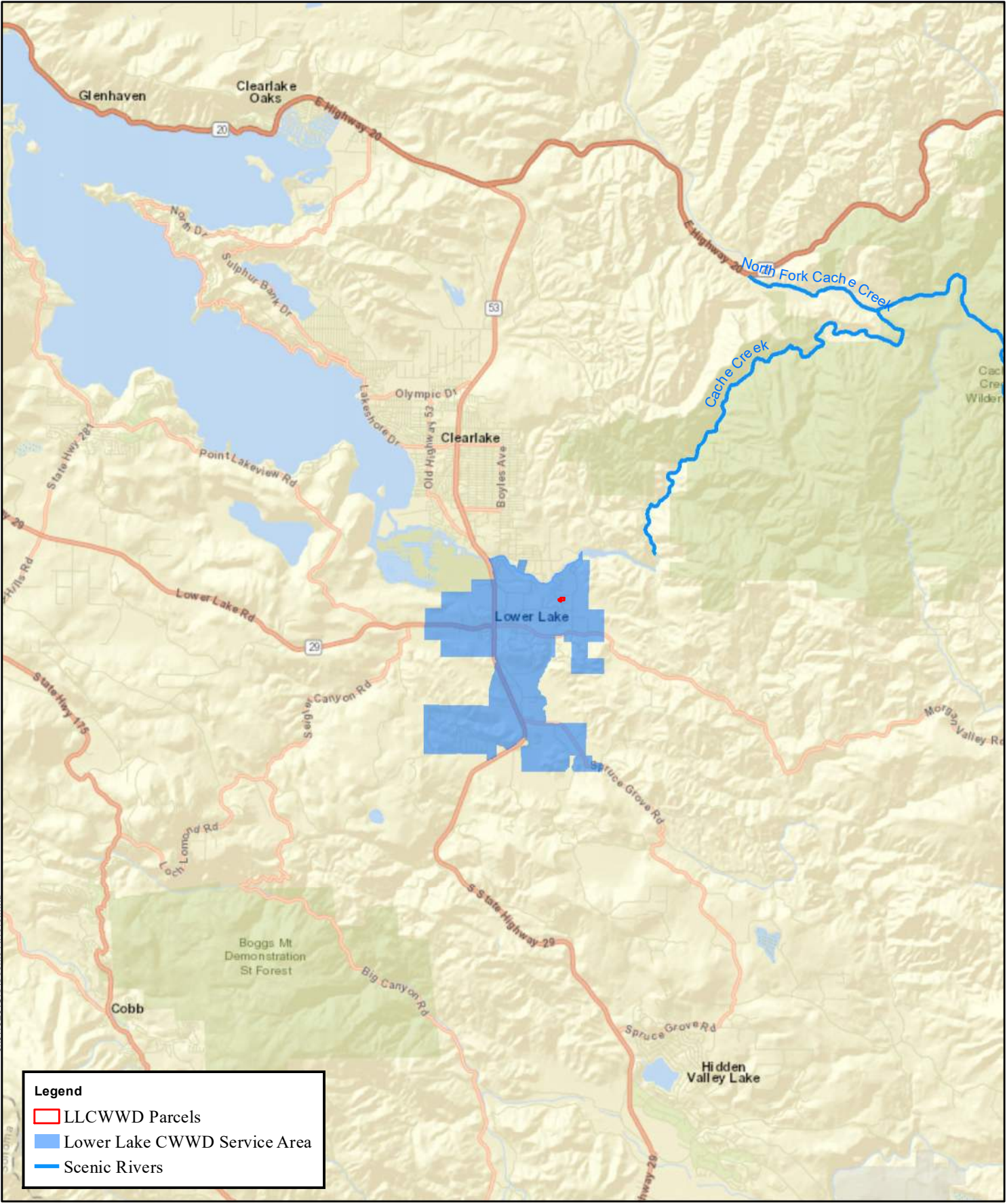


FIGURE X-1
SURFACE WATERS

LOWER LAKE CWWD
MARCH 2024

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Legend

- LLCWWD Parcels
- Lower Lake CWWD Service Area
- Scenic Rivers

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
State of California

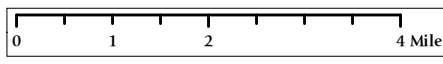
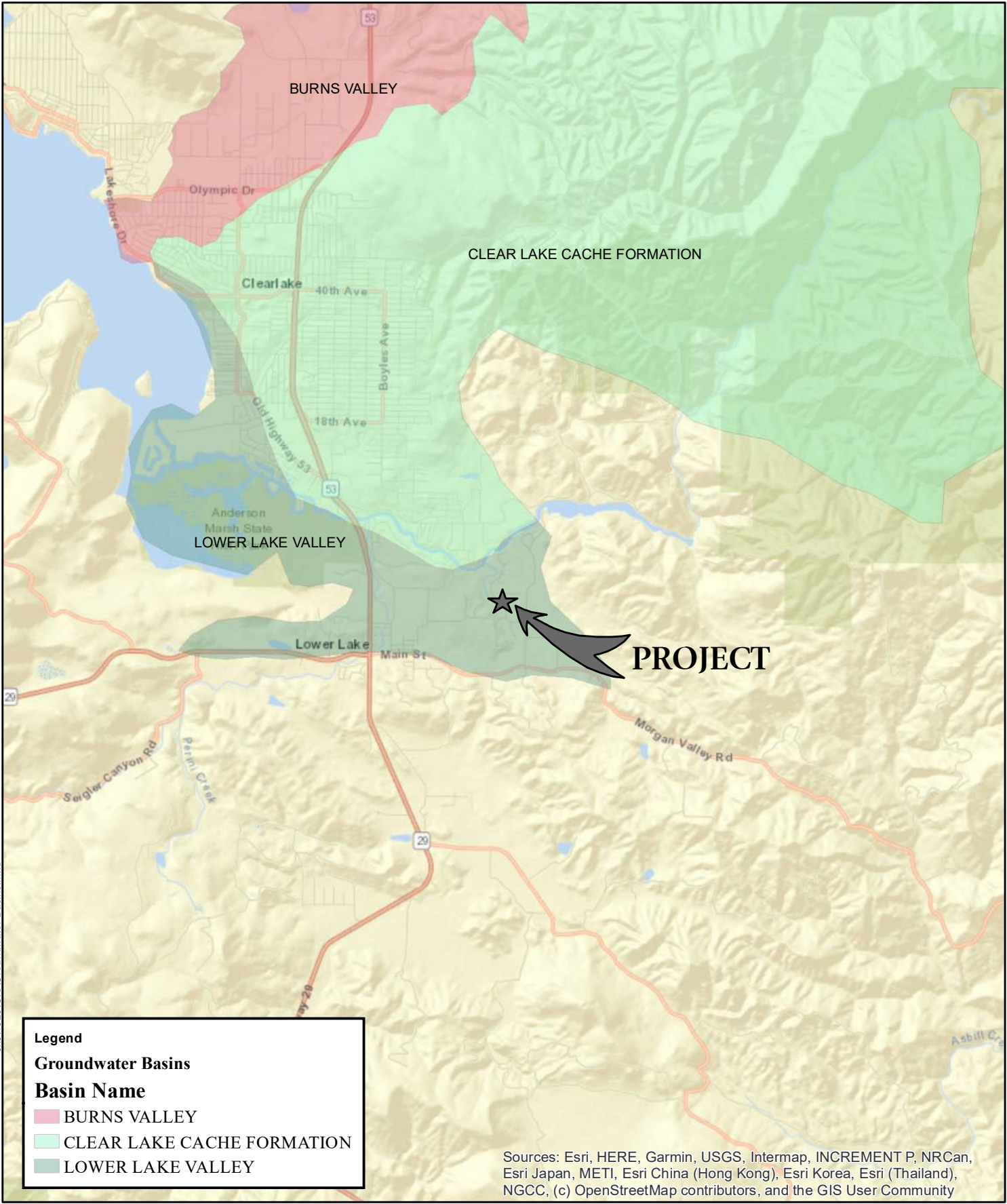


FIGURE X-2
SCENIC RIVERS

LOWER LAKE CWWD
MARCH 2024



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Legend

Groundwater Basins

Basin Name	Color
BURNS VALLEY	Pink
CLEAR LAKE CACHE FORMATION	Light Green
LOWER LAKE VALLEY	Dark Green

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

DATA SOURCES
 California Water Resources Control Board

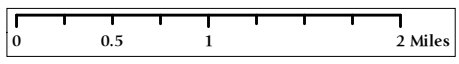
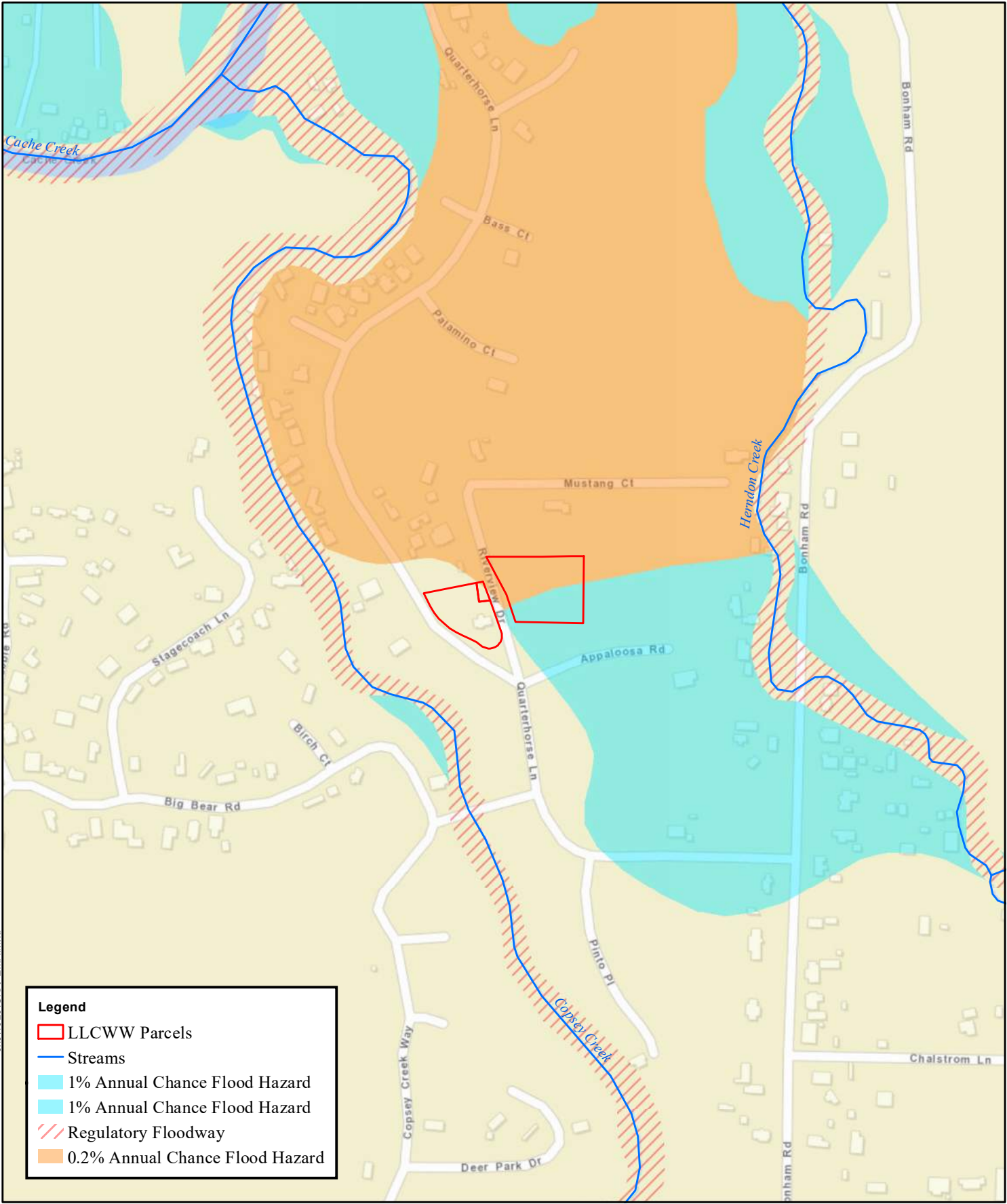


FIGURE X-3
GROUNDWATER BASINS

LOWER LAKE CWWD
 MARCH 2024

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3/21/2024



Legend

- LLCWW Parcels
- Streams
- 1% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- 0.2% Annual Chance Flood Hazard

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
FEMA

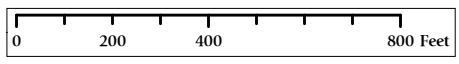


FIGURE X-4
FEMA Flood Map
LOWER LAKE CWWD
MARCH 2024

Regulatory Setting

FEDERAL REGULATIONS

Clean Water Act

Important applicable sections of the federal CWA (33 USC 1251–1376) are identified below:

- Sections 303 and 304 provide water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the CWA. Certification is provided by the Regional Water Quality Control Board (RWQCB).
- Section 402 establishes the NPDES permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the RWQCB.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and issues NPDES permits to cities and counties through regional water quality control boards. The project location is regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB).

The SWRCB has issued a statewide General Permit (Water Quality Order No. 99-08-DWQ) for construction activities within the state. The Construction General Permit (CGP) is implemented and enforced by the RWQCBs. The CGP applies to construction activity that disturbs one acre or more and requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that identifies best management practices (BMPs) to minimize pollutants from discharging from the construction site to the maximum extent practicable.

The SWRCB has also issued a statewide General Permit (Water Quality Order No. 97-03-DWQ) for regulating stormwater discharges associated with industrial activities. This General Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable and best conventional pollutant control technology. It also requires the development of a SWPPP, a monitoring plan, and the filing of an annual report.

Certain actions during construction may also need to conform to a General Permit (Water Quality Order No. 5-00-175) that requires that a permit be acquired for dewatering and other low threat discharges to surface waters, provided that they do not contain significant quantities of pollutants and are either (1) four months or less in duration, or (2) the average dry weather discharge does not exceed 0.25 million gallons per day (mgD). Examples of activities that may require the acquisition of such a permit include construction dewatering, pump testing, pipeline/tank pressure testing, pipeline/tank flushing or dewatering, and other miscellaneous dewatering/low threat discharges.

Lake County is listed by the CVRWQCB as an NPDES Phase II program municipality that must comply with Water Quality Order No. 2013-0001-DWQ pertaining to post-construction stormwater best management

practices (BMPs) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems. Permittees must meet the requirements in Provision D of the General Permit which require the development and implementation of a Storm Water Management Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development
- Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations.

A SWMP was completed by Lake County, and a complete application was acknowledged by the SWRCB with a staff recommendation for approval, effective October 2003. The Lake County Clean Water Program (LCCWP) Stormwater Program was also established as a joint effort among the Lake County Watershed Protection District, Lake County, the City of Clearlake, and the City of Lakeport in an effort to reduce the impacts of increases in peak flows from development and damage caused by polluted stormwater runoff.

STATE REGULATIONS

Porter-Cologne Water Quality Act

The State of California's Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.) provides the basis for water quality regulation in California. This Act requires a Report of Waste Discharge for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. Based on the report, the RWQCBs issue waste discharge requirements to minimize the effect of the discharge.

Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The project has the potential to cause construction-related violations of water quality standards. Implementation of the proposed project would involve well drilling, excavation, minor grading, and other construction activities involving soil disturbance that could potentially impact water quality by increasing the potential for erosion and sedimentation. Soil disturbance associated with construction activities may cause accelerated soil erosion and sedimentation and/or the release of pollutants to downstream properties and facilities that could impact water quality standards or waste discharge requirements.

The State General Construction Activity Storm Water Permit (CGP) applies to construction activities that disturb one acre or more and requires the preparation and implementation of a SWPPP. The project is under the one-acre threshold and not required to prepare a SWPPP. Mitigation Measure

GEO1 requires the preparation of an erosion control plan to ensure that water quality impacts would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Water supply in the project area and District has and will continue to be provided by the District's wells. The proposed new well is intended to provide reliability and system resiliency, consistent with regulations, and is not required to support additional growth in the project area. The project is not growth inducing and would not impact existing demands or groundwater levels in the project area or elsewhere. The project does not introduce any significant impervious surfaces and would not substantially interfere with groundwater recharge or groundwater basin management.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

c.i. result in a substantial erosion or siltation on- or off-site?

The project would not substantially alter the existing area drainage at the project location. New impermeable surface would be introduced associated with the well and the Phase II storage tank and booster pump building, but drainage would be provided to ensure no substantial erosion or siltation occurs. Total impervious surface introduced by the project is approximately 1,000 to 2,000 square feet.

c.ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

The project would not alter the course of a stream or river and would not substantially alter the existing drainage pattern of the project site. As shown on Figure X-4, the Phase I and Phase II projects are mapped to be within the 100- and 500-year flood plain but would not impact flows within the floodway. All facilities would be designed to resist potential impacts from flooding.

c.iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project does not significantly alter existing grades in the project area or introduce any significant impervious surfaces that would impact local stormwater systems or result in substantial additional sources of polluted runoff. There is currently no post-construction stormwater treatment in the project area, and none is proposed by the project due to its limited nature and lack of significant impervious surfaces.

c.iv. Would the project impede or redirect flows?

As shown on Figure XI-4, the project is mapped within the 100- and 500-year flood plain. Facilities are minor (smaller than residential units in the project area) and would not impede or redirect flows during flooding events.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project is not in an area subject to inundation by seiche, tsunami or mudflows. Please see item c.iv. above regarding flooding.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Please see a.), above.

Cumulative Impacts

There are no adverse cumulative environmental impacts to hydrology/water quality resulting from implementation of the proposed project.

Mitigation Measures

Please see GS1 in the Geology and Soils section.

XI LAND USE & PLANNING

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Development in the project area is governed by the County of Lake General Plan, zoning ordinances and the Lower Lake Area Plan. The project area is zoned R1, as shown on Figure XI-1.

Analysis

a. Would the project physically divide an established community?

The project would not physically divide an established community. The project occurs within the existing water treatment facility parcel and an adjacent undeveloped lot in a residential area of an existing developed community. Roadways would be restored upon completion of the project. Implementation of the project would improve water availability across the existing water system, a benefit to the existing established community.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

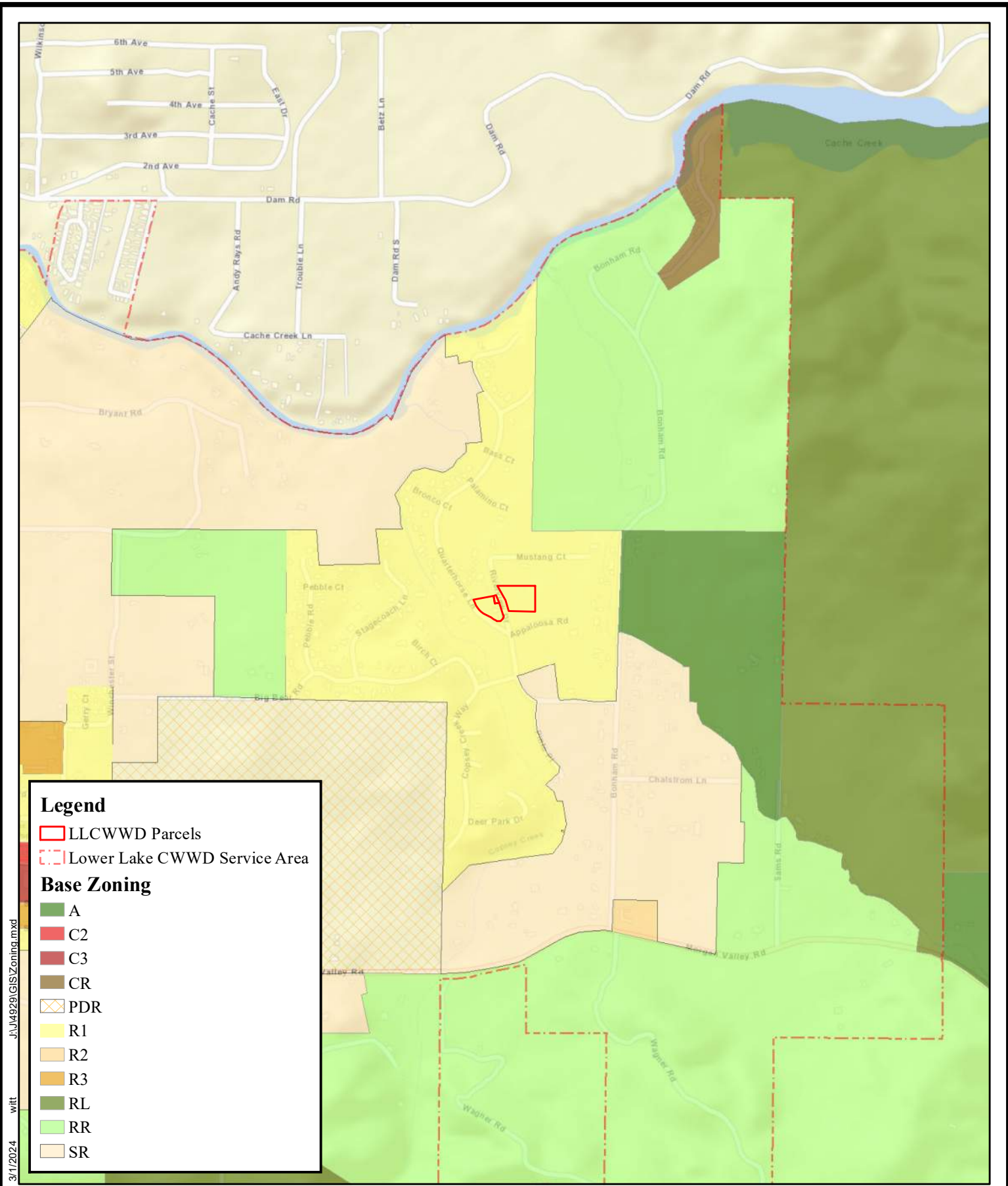
The project would not conflict with any applicable land use plan, policy or regulation. All project components occur within public right of way or on parcels owned by project water systems. Water systems are consistent uses with applicable planning policies.

Cumulative Impacts

There are no adverse cumulative environmental impacts to land use and planning resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to land use and planning have been identified; therefore, no mitigation is required.



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Legend

- LLCWWD Parcels
- Lower Lake CWWD Service Area

Base Zoning

- A
- C2
- C3
- CR
- PDR
- R1
- R2
- R3
- RL
- RR
- SR

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

Data Source Information:
 Zoning: Lake County GIS

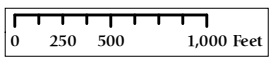


FIGURE XI-1
ZONING

LOWER LAKE CWWD
MARCH 2024

XII MINERAL RESOURCES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Environmental Setting

Lake County is historically known for quicksilver mining operations that occurred in the 19th and 20th Centuries. Gold was also a mineral that was mined in Lake County. The most notable quicksilver mine was the Sulphur Bank Mine located near Clearlake Oaks. This mine started operations in 1856 and was established to originally mine borax, but was then retooled to mine for sulfur. Mercury was mined intermittently from 1873 to 1957, when the mine ceased operations. The Sulphur Bank Mine is both a California Historical Landmark and a superfund site. More recently, the McLaughlin Gold Mine located east of the unincorporated community of Lower Lake and within both Lake and Napa Counties was operated by the Homestake Mining Company from 1985 until 1996. Previously the site also was used for mercury mining. The nearest known operating mine today is the Point Lakeview Rock and Redi-mix lava rock operation in the vicinity of Lower Lake. No mineral resources are currently mapped within the project area.

REGULATORY SETTING

LAKE COUNTY GENERAL PLAN

No applicable general plan or specific plan indicates that there are mineral resources of value or importance in the project area.

Analysis

- a. **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

The project site does not include any known mineral resources that would be of value to the region and the residents of the state. The project would not affect the availability of any such resource.

- b. **Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

The project area is not delineated in the County's General Plan or Lower Lake Area Plan as a locally important mineral resource recovery site.

Cumulative Impacts

There are no adverse cumulative environmental impacts to mineral resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to mineral resources have been identified; therefore, no mitigation is required.

XIII NOISE

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project result in generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

This section includes a description of the terminology and concepts related to noise impacts that are considered in the analysis. This section also includes a discussion of the existing environmental conditions related to noise-sensitive receptors and ambient conditions found in rural areas such as the project vicinity.

NOISE-SENSITIVE USES

Noise-sensitive land uses in the project area are nearby single residences. There are residential uses located adjacent to the project parcels.

NOISE CONDITIONS

Existing ambient sound levels in the project area can be considered typical of a rural residential environment. Sources of noise in the immediate project area come primarily from traffic along local roadways.

CONSTRUCTION NOISE

The types of equipment that would be used to construct the proposed pipeline include asphalt/concrete trucks, backhoes, compactors, compressors, a small dump truck, a small tracked excavator, forklifts, a front-end loader, paving equipment, flat-bed delivery trucks (pickup trucks), and a water truck.

The table below presents the typical noise levels for the construction equipment listed above based on a worst-case scenario including several pieces of the loudest equipment (running simultaneously). This includes the typical measured A-weighted Lmax noise levels (maximum noise level) that would occur at a 100-foot

distance from the construction site. The acoustical use factor is the fraction of time that the equipment would typically be in use over a 1-hour period.

Equipment	Acoustical Use Factor	Typical Noise Level (L _{max}) ¹
Asphalt/Concrete Truck ²	40%	76
Backhoe	40%	78
Compactor	20%	83
Compressor	40%	78
Crane	16%	81
Dump Truck	40%	76
Excavator	40%	81
Forklift ³	40%	75
Front-End Loader	40%	79
Jackhammer	20%	89
Paver	50%	77
Pickup Truck	40%	75
Roller	20%	80
Water Truck ²	40%	76

Source: Federal Highway Administration 2006

1 dBA, A-weighted decibel level (measured at 50 feet)

2 Based on data for dump truck

3 Based on data for pickup truck

OPERATIONAL NOISE

During operation, the proposed project would not create noise that would be audible. Water mains and the well would be installed below ground and do not emit noise. The pump station would be placed inside of a building to attenuate noise and modifications to existing piping would not alter operational noise conditions. The water storage tank would similarly not emit noise.

Regulatory Setting

LOCAL REGULATIONS

Lake County General Plan Noise Exposure Limits

In accordance with the State Guidelines for General Plans, the Lake County General Plan provides guidance for the acceptability of projects within specific noise level criteria. Noise associated with construction activities occurring between 7:00 a.m. and 7:00 p.m. are exempted from the provisions of the Lake County noise ordinance.

Analysis

- a. **Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

The project would not result in any significant long-term increases in noise levels in the project vicinity. The proposed Phase 1 and Phase II facilities are not associated with the production of noise and daily operations currently occur at the project site and those operational noises would not significantly increase.

Homes in the project area would be subject to construction-related noise. Provided the general construction activities (as defined by the County's noise ordinance) occur between 7:00 a.m. and 7:00 p.m., there would be no statutory noise impact related to general construction activities. Implementation of Mitigation Measure N1 would further reduce construction-related noise.

- b. **Would the project result in generation of excessive ground borne vibration or ground borne noise levels?**

Implementation of the project would not result in the exposure of people to or the generation of groundborne vibration or noise levels. No pile driving, blasting or similar construction techniques that would generate such vibration are required.

- c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

There are no active public use airports within two miles of the project area. The abandoned airport in Clearlake is not part of an airport land use plan and is not operational. The project would not alter the existing noise environment resulting from air traffic.

Cumulative Impacts

There are no adverse cumulative environmental impacts to noise resulting from implementation of the proposed project.

Mitigation Measures

N1

The following measures shall be implemented at the construction site to reduce the effects of construction noise on adjacent residences:

- Noise-generating activities at the construction sites or in areas adjacent to the construction sites associated with the project in any way shall generally be restricted to the hours of 7:00 a.m. to 7:00 p.m.

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Staging of construction equipment and all stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be staged as far as practical from existing noise sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to the point where radio noise is not audible at existing residents bordering the project site.
- Notify adjacent residents to the project site of the construction schedule in writing.

XIV POPULATION & HOUSING

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The project would not induce population growth. The project provides improvements to the existing water system to improve reliability and resilience. The new well would provide redundancy and regulatory compliance. The storage tank and booster pump would provide needed storage and provide increased pressure deliveries from the location to the rest of the water distribution system. None of the components would cause substantial unplanned population growth in the area and are intended to serve existing customers.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No housing would be displaced by the project. The project is specifically intended to facilitate the long-term ability to provide the existing community with water service.

Cumulative Impacts

There are no adverse cumulative environmental impacts to population and housing resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to population and housing have been identified; therefore, no mitigation is required.

XV PUBLIC SERVICES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project area falls within the jurisdiction of the Lake County Sheriff. Fire protection services to the project area are provided by Lake County Fire Protection District with the nearest fire station located in Lower Lake. The project area is served by the Konocti Unified School District

Analysis

- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

a.i. Fire protection?

The project would not have any negative effect on fire protection services. The project does not alter above ground conditions in a way that would negatively impact fire protection or access to/from the project area. The project provides the benefit of increased water availability and reliability within the District service area and Phase II would increase storage and water system pressure, benefits to fire protection.

a.ii. Police protection?

The project is not growth inducing and would not impact police protection.

a.iii. Schools?

The proposed project is a water system improvement project and would not have a negative long-term impact to schools. Lower Lake High School and Elementary School would benefit from the system improvements through improved service and system resiliency.

a.iv. Parks?

The project would not impact any parks.

a.v. Other public facilities?

The project would not impact other public facilities.

Cumulative Impacts

There are no adverse cumulative environmental impacts to public services resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to public services have been identified; therefore, no mitigation is required.

XVI RECREATION

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

There are no neighborhood or regional parks or other recreational facilities in the immediate project area, as shown on Figure XVI-1. The closest recreation areas include Anderson Marsh Historical Park and Redbud Park.

Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project is not growth inducing and would not increase use of existing neighborhood and regional parks or other recreational facilities. The project would not impact any parks.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project does not include recreational facilities or alter such facilities in any way.

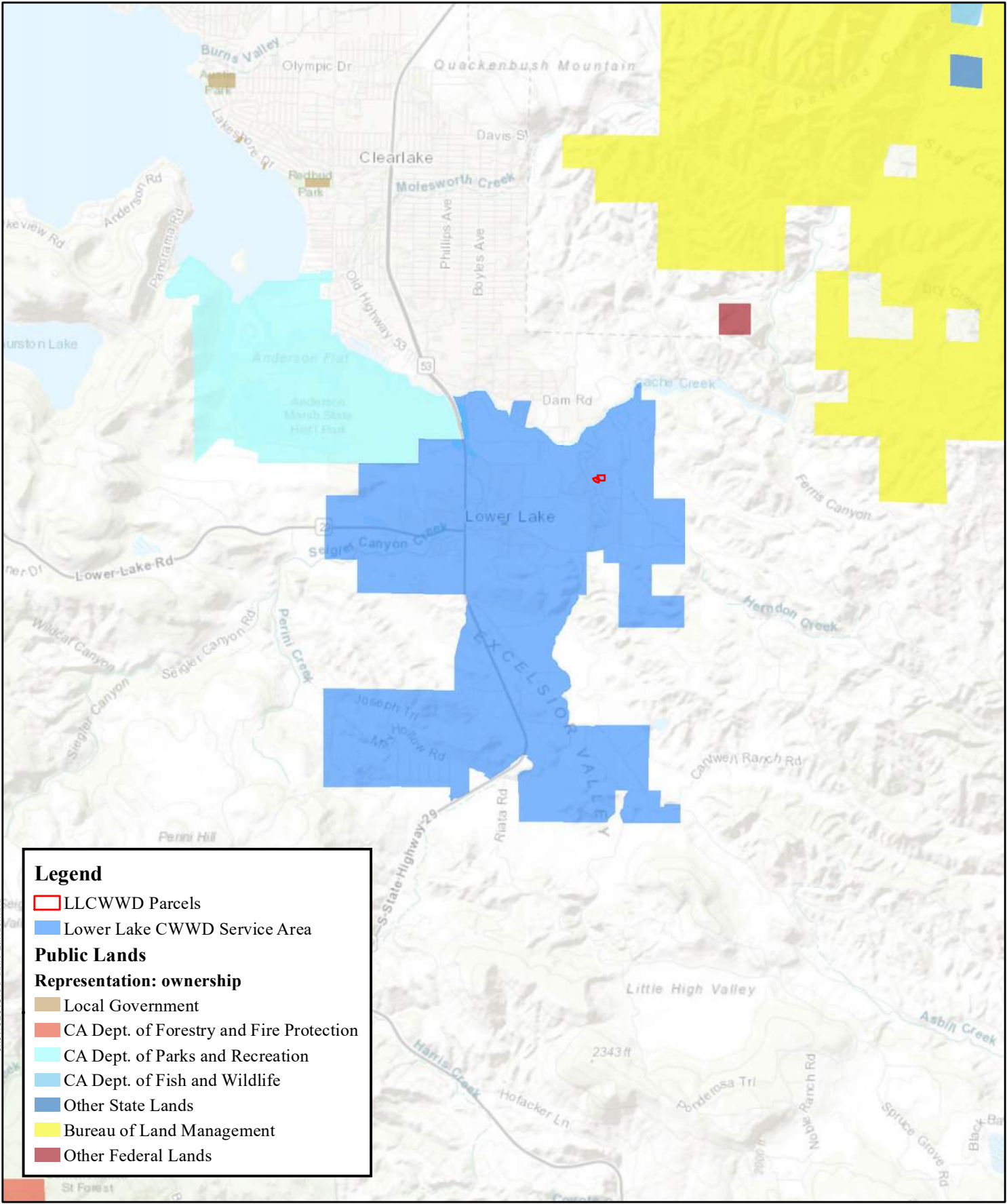
Cumulative Impacts

There are no adverse cumulative environmental impacts to recreation resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to recreation have been identified; therefore, no mitigation is required.

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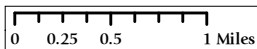


Legend

- LLCWWD Parcels
- Lower Lake CWWD Service Area
- Public Lands**
- Representation: ownership**
- Local Government
- CA Dept. of Forestry and Fire Protection
- CA Dept. of Parks and Recreation
- CA Dept. of Fish and Wildlife
- Other State Lands
- Bureau of Land Management
- Other Federal Lands

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

Data Source Information:
Public Lands: CalFire (2017)



**FIGURE XVI-1
PUBLIC LANDS**

**LOWER LAKE CWWD
MARCH 2024**

XVII TRANSPORTATION

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project area is located in the northeasterly portion of the community of Lower Lake. State Highway 53 and Morgan Valley Road provide the primary access to the area and internal roads provide access to individual residences within the community. The project location is bisected by Riverside Drive, a narrow two-lane residential street that dead ends north of the project.

Analysis

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project does not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The project is partially located within Riverside Drive but would not have a long-term impact on an applicable transportation plan, ordinance or policy. The roadway would be restored once construction connecting the two sites is completed.

b. Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

The project does not conflict with and is not inconsistent with CEQA Guidelines § 15064.3, subdivision (b). The project does not increase vehicle trips to or from the project area as the water treatment facility already exists and the project would not expand operational demands. Where the project impacts the roadway, the roadway surface would be restored to existing conditions or improved upon project completion.

Construction would reduce access to vehicle, pedestrian and bike traffic on Riverview Drive north of the project location. Standard traffic control mitigation provided in TT1 would reduce these impacts and ensure traffic flow and access to driveways when active construction is not underway.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not increase design hazards. The road surface would be restored to existing conditions in the portion of the connection constructed in Riverview Drive.

d. Would the project result in inadequate emergency access?

The project would not have any long-term impact to emergency access since the roadway would be restored to existing conditions. Construction activities in the roadway could impact emergency response during construction. Mitigation Measure TT2 requires the contractor to maintain emergency access and reduces such impact to less than significant.

Cumulative Impacts

There are no adverse cumulative environmental impacts to transportation/traffic resulting from implementation of the proposed project.

Mitigation Measures

TT1

The contractor shall develop and submit an appropriate Traffic Control Plan (TCP) in accordance with the California Manual of Uniform Traffic Control Devices (MUTCD) for review and approval by the District and County for all project elements that impact traffic circulation. The TCP shall also include notifying adjacent businesses and residents of the construction schedule and when it will impact access. The TCP shall ensure thru traffic and temporary driveway access during periods where active construction is not taking place.

TT2

The contractor shall provide advanced notice regarding timing, location and the duration of construction activities to local emergency responders. The contractor shall ensure emergency responders can have access through construction areas in roadways at all times.

XVIII TRIBAL CULTURAL RESOURCES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

Assembly Bill 52 (AB52), the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. AB52 established a formal consultation process for California Native American Tribes to be conducted with the CEQA process. All projects that file a notice of intent to adopt a mitigated negative declaration after July 1, 2016, are subject to AB52 which added tribal cultural resources (TCR) protection under CEQA. A TCR is defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American Tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Analysis

- a. **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
- a.i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

The field investigation described in the Cultural Resources section of this document identified one historical resource eligible for the California Register of Historic Resources. Intact archaeological deposits associated with the site are likely to be impacted by the project. Damage of intact archaeological deposits would represent an adverse effect, and under the California Code of Regulations Section 15064.5, a lead agency shall identify potentially feasible measures to mitigate significant adverse effects. CEQA recommends the lead agency consider project alternatives which allow for preservation, and this objective can be addressed by project redesign for avoidance, or the implementation of a conservation easement, “capping” and deed restriction, or a greenspace/open space. If these preservation methods cannot be accommodated, and adverse effects cannot be minimized, further mitigation measures are warranted, generally in the form of data recovery to obtain a “statistically valid sample” of the “scientifically consequential information from or about the resource” (CEQA sec. 15126.4c). Please see item a.ii., below.

- a.ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

In December 2023, STH initiated Project-related coordination with Middletown Rancheria of Pomo Indians Tribal Historic Preservation Officer Michael Rivera. The cultural resource field survey was conducted by Dr. White and Mr. Rivera. Culturally-sensitive locations in the area and potential resources of concern to the Tribe including possible archaeological and non-archaeological Traditional Cultural Properties (TCPs) were discussed in the field. A draft final of the report was submitted to Mr. Rivera for review and approval of results and recommendations. Mr. Rivera indicated that he will be available for additional Native American coordination for this project and will seek an agreement for tribal monitoring of all ground-disturbing activity.

As part of the AB52 tribal consultation process, project information was sent via certified mail and email to Mr. Rivera by the District on March 22, 2024. Mr. Rivera responded via email on March, 22, 2024, requesting formal consultation.

The District will be in consultation with the Middletown Rancheria of Pomo Indians during the 30-day public review period of this document. The District expects to enter into a Cultural Resources Monitoring and Treatment Agreement with the Tribe for project-related ground disturbing activities to ensure Tribal Cultural Resources are avoided where possible, preserved where possible or mitigated as required. Mitigation measure TCR1 outlines elements of the anticipated agreement.

Cumulative Impacts

There are no adverse cumulative environmental impacts to tribal cultural resources resulting from implementation of the proposed project.

Mitigation Measures

TCR1

The District shall enter a Cultural Resources Monitoring and Treatment Agreement with the Middletown Rancheria of Pomo Indians for all project-related ground disturbing activities. Phase I and Phase II would likely proceed under separate Agreements due to the time between phases. It is anticipated that the Agreement will consist of the following:

- In keeping with CEQA Guidelines Section 15064.5(f) and procedures required by Section 21082 of the Public Resources Code, the District shall retain a professional archaeologist who (a) meets the Secretary of the Interior's Guidelines for an Archaeological Principal Investigator and (b) possesses the training and experience to recognize human remains in articulated, disarticulated, and cremated condition;
- The District shall maintain Native American coordination with the Middletown Rancheria of Pomo Indians, and support collaboration between the professional archaeologist and Tribal Historic Preservation Officer Michael Rivera on all data recovery efforts;
- The District shall make provisions for monitoring by the Professional Archaeologist in tandem with Middletown Rancheria of Pomo Indians' designated representative. This monitoring team should then be tasked with close inspection of all subsurface excavations, and should be provisioned with the authority to halt all work in the vicinity of archaeological finds in order to determine the integrity and tribal and archaeological significance of the resource. If the find is determined to be an intact historical or unique archaeological resource, then the project proponent should consider project re-design to avoid or minimize impacts, and if impacts cannot be avoided, then the professional archaeologist should implement immediate mitigation data recovery measures. Work may continue in other parts of the project area concurrent with evaluation and mitigation;
- Data recovery measures may include hand-excavation of that portion of the trench where intact and significant archaeological deposits are encountered and screening of recovered soils;
- Archaeological materials from data recovery shall be analyzed and a professional report shall be prepared in accordance with consulting tribe's recommendations and applicable CEQA provisions.

XIX UTILITIES & SERVICE SYSTEMS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The District currently provides water service to the project area and the rest of its service area, primarily within the community of Lower Lake. The major Lake County landfill is the South Lake Refuse and Recycling Center, located in the City of Clearlake, approximately ten miles from the project area. Wastewater treatment in the project area is provided by individual septic systems.

Analysis

- a. **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

The project would not require or result in the relocation or construction of new or expanded wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. The project includes improvements to the District's existing water system and is subject to environmental review in this document. The project is not growth inducing and would not increase demand for utilities in the service area.

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

The project is a water system improvement project, is not growth inducing and would not increase overall demand for water in the service area. The new well would provide the District's system supply redundancy and resiliency during droughts but is not intended to increase overall groundwater withdrawal. The Phase II project similarly increases overall system resiliency.

- c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The project does not alter the existing septic systems in the project area. The proposed Phase I well would be provided a minimum 100-foot setback from adjacent septic systems for regulatory compliance.

- d. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

No increase in solid waste generation would occur as the project would not increase solid waste demands or impair attainment of solid waste reduction goals. Any demolition materials would be processed according to state regulations.

- e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

The project would comply with federal, state and local statutes and regulations related to solid waste.

Cumulative Impacts

There are no adverse cumulative environmental impacts to utilities and service systems resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to utilities and service systems have been identified; therefore, no mitigation is required.

XX WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

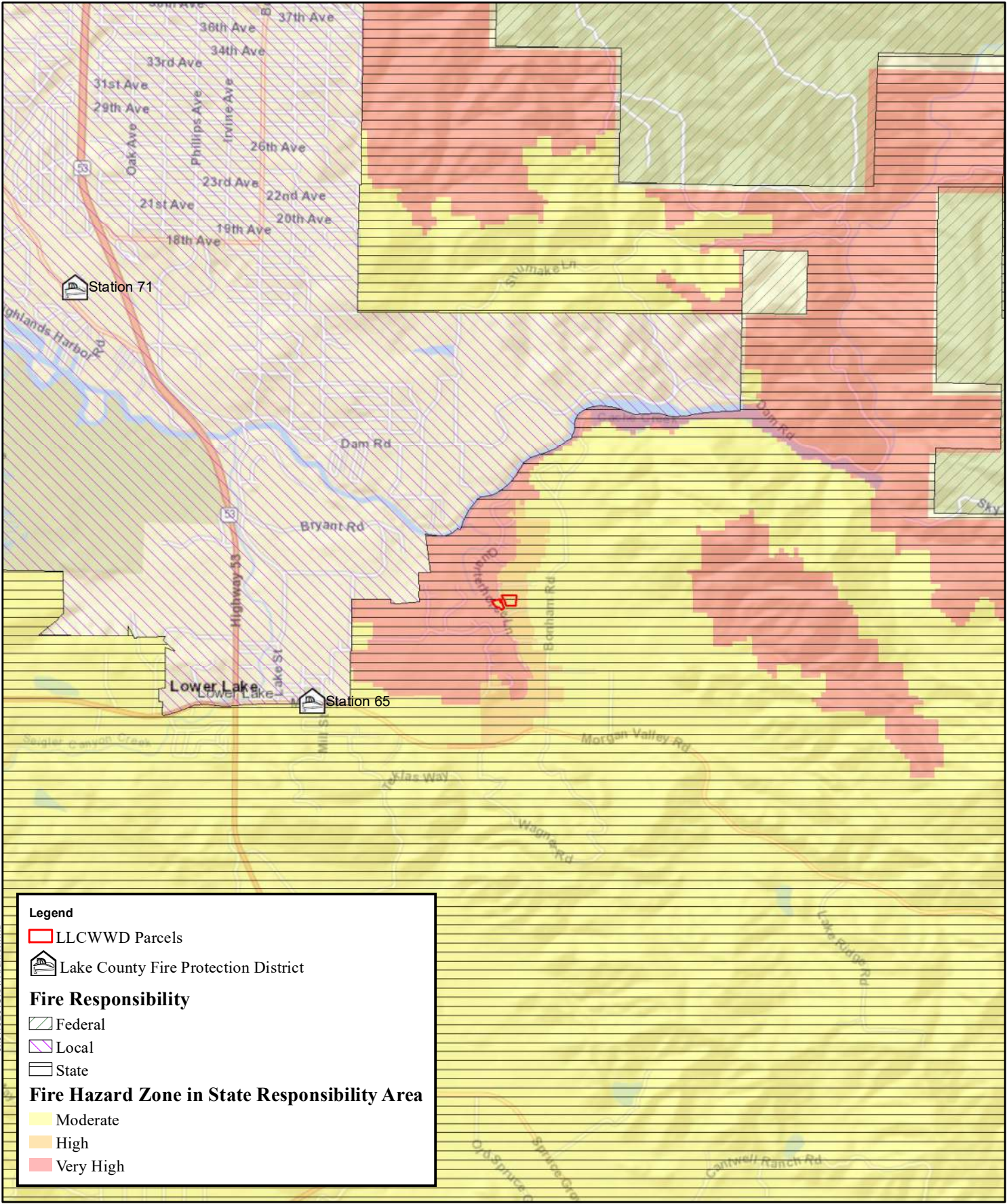
Environmental Setting

The Lake County Emergency Response Plan facilitates response by the Lake County Department of Health Services when medical and health services are required as a result of catastrophic events. The project is located within the Lake County Fire Protection District and included in the County’s 2018 Lake County Emergency Operations Plan²⁰ and the Draft 2017 Lake Operational Area, Lake County Emergency Operations Plan, Urban and Wildland Interface Annex²¹. Fire protection in the area is divided among three responsibility areas: Federal, CalFire and Local (Lake County Fire Protection District). Lake County Fire Protection District operates three fire stations near the project area. CalFire has also designated fire hazard risks for land within their responsibility area. This information is portrayed on Figure XX-1.

Lake County has been subject to multiple wildfires each year over the last several years. More than half of the county has burned since 2012. Post 2000 wildfires over 1,000 acres that have occurred in the project area are shown on Figure XX-2.

²⁰ 2018 Lake County Emergency Operations Plan. Office of Emergency Services. May 1, 2018.

²¹ Draft 2017 Lake Operational Area Lake County Emergency Operations Plan, Urban and Wildland Interface Annex. Lake County Fire Chief’s Association.



Legend

- LLCWWD Parcels
- Lake County Fire Protection District

Fire Responsibility

- Federal
- Local
- State

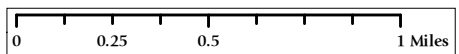
Fire Hazard Zone in State Responsibility Area

- Moderate
- High
- Very High

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Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US

DATA SOURCES
 CalFire



**FIGURE XX-1
 WILDFIRE RISK AND
 RESPONSIBILITY AREAS**

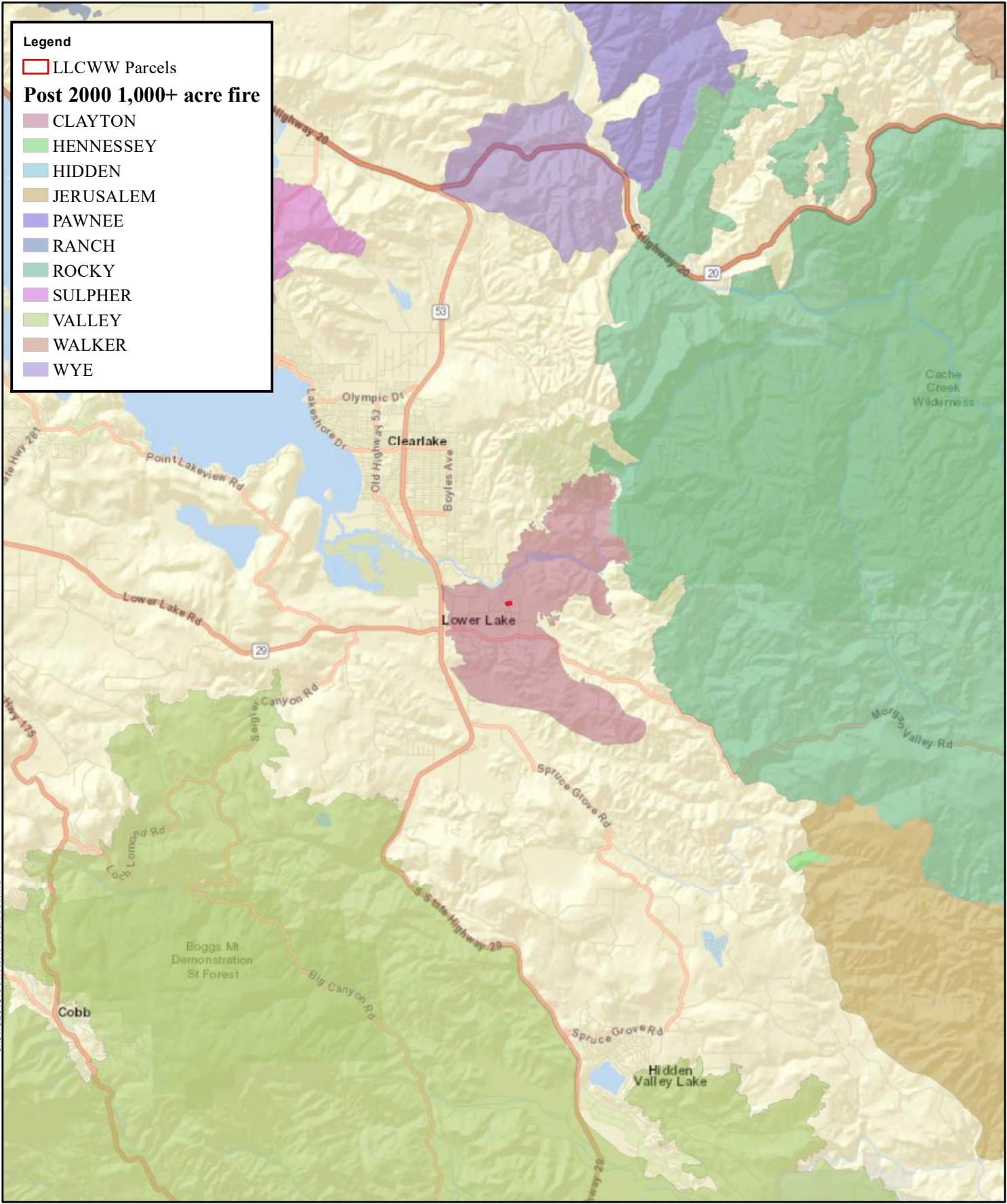
**LOWER LAKE CWWD
 MARCH 2024**

Legend

LLCWW Parcels

Post 2000 1,000+ acre fire

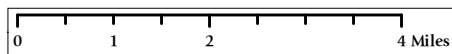
- CLAYTON
- HENNESSEY
- HIDDEN
- JERUSALEM
- PAWNEE
- RANCH
- ROCKY
- SULPHER
- VALLEY
- WALKER
- WYE



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3/1/2024

Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
Units: Foot US

DATA SOURCES
Parcels: County of Lake
Streets: County of Lake
California Water Resources Control Board



**FIGURE XX-2
HISTORIC WILDFIRES**

**LOWER LAKE CWWD
MARCH 2024**

Analysis

- a. **Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The project area has recently experienced devastating wildfires. The project would bolster water supplies, reliability during drought and pressure in the existing water service area, thereby improving firefighting capacities within the service acre. The project would not have any long-term impact to emergency access since Riverview Road would be restored to existing conditions. Construction in roadways could impact emergency response during construction. Mitigation Measure TT2, in the Transportation section, requires the contractor to maintain emergency access and reduces such impact to less than significant.

- b. **Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

The project would improve capacity, storage and pressure within the existing water system. The project would improve firefighting ability by increasing water available to firefighters.

- c. **Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

The project does not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. The project would improve firefighting ability by increasing water available to firefighters.

- d. **Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

The project does not alter existing risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The project increases firefighting capabilities in the area.

Cumulative Impacts

There are no adverse cumulative environmental impacts from wildfire resulting from implementation of the proposed project.

Mitigation Measures

Please see Mitigation Measure TT2 contained in the Traffic section.

XXI MANDATORY FINDINGS OF SIGNIFICANCE

- a. **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

With implementation of the mitigation measures provided in this document, the project is not expected to have a significant adverse impact on the habitat of any plant or animal species, humans or historic or prehistoric resources. Furthermore, the project would not substantially degrade the environment or reduce the level of an endangered or otherwise important plant or animal population below self-sustaining levels. This impact is considered less than significant with incorporation of the proposed mitigation measures.

- b. **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Implementation of the proposed mitigation measures would reduce impacts to less than significant levels. Because no impact is considered to be individually significant and there are no other large projects occurring in the project area, there would be no contribution to a significant cumulative effect. Therefore, this impact is less than significant with incorporation of the proposed mitigation measures.

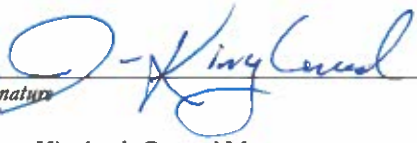
- c. **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

With implementation of the mitigation measures provided in this document, the project is not expected to cause substantial adverse effects on human beings either directly or indirectly. Provision of safe and reliable water is a beneficial impact to the existing population in the service area. Mitigation measures reduce any such potential to less than significant.

DETERMINATION


On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature
James Kingland, General Manger

Printed Name



Date
For:
Lower Lake County Waterworks
District No. 1

DOCUMENT PREPARATION AND SOURCES

2018 Lake County Emergency Operations Plan. Office of Emergency Services. May 1, 2018.

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California Environmental Quality Act Guidelines. 2019.

California Environmental Quality Act Air Quality Guidelines. Bay Area Air Quality Management District. May 2017.

Cultural Resource Investigation of the Proposed Lower Lake County Waterworks District Pump Plant Upgrade Project, APN#S 049-011-05, 049-011-06, and 049-021-22. Gregory G. White, PhD, RPA, Principal Investigator, Sub-Terra Heritage Resource Investigations. Draft Report. February 12, 2024.

Draft 2017 Lake Operational Area Lake County Emergency Operations Plan, Urban and Wildland Interface Annex. Lake County Fire Chief's Association.

Fault-rupture Hazard Zones in California. Special Publication 42. Revised 1997. Department of Conservation, Division of Mines and Geology. 1983.

Lake County General Plan. Lake County Community Development Department. 2008.

Lake County Zoning Ordinance

Lake County Community Development GIS.

http://www.lakecountycalifornia.gov/Government/Directory/Community_Development/Planning/Maps_GIS.htm

Lake County Air Quality Management District

Lake County Important Farmland 2020. California Department of Conservation Farmland Mapping and Monitoring Program. 2020.

Lake County Aggregate Resource Management Plan

Lake County Airport Land Use Compatibility Plan

Lake County Emergency Management Plan

Lake County Hazardous Waste Management Plan, adopted 1989

Lake County Environmental Health Division

Paleontological Collecting. 1987. National Academy Press. Washington, DC.

Websites

http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

<https://www.energy.ca.gov/renewables/history.html>

https://www.energy.ca.gov/2018_energypolicy/

https://www.energy.ca.gov/almanac/electricity_data/us_per_capita_electricity.html

<https://www.census.gov/quickfacts/lakecountycalifornia>

<http://www.ecdms.energy.ca.gov/elecbycounty.aspx>

<http://www.arb.ca.gov/desig/adm/adm.htm>

https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf

Prepared by:

Justin Witt—Environmental Planner

APPENDIX A: MITIGATION MONITORING AND REPORTING PLAN

Lower Lake County Waterworks District No. 1 New Well, Storage Tank and Booster Pump April 2024

Pursuant to Section 21081.6 of the State CEQA Guidelines¹, the mitigation measures listed in this Mitigation Monitoring and Reporting Plan (MMRP) are to be implemented as part of the proposed project. The MMRP identifies the time at which each mitigation measure is to be implemented and the person or entity responsible for implementation. The initials of the designated responsible person will indicate completion of their portion of the mitigation measure. The Lower Lake County Waterworks District No. 1 (District) project manager's signature on the Certification of Compliance will indicate complete implementation of the MMRP.

The mitigation measures included in the MMRP are considered conditions of approval of the proposed project. The District agrees to implement the mitigation measures proposed in the MMRP. Implementation of the mitigation measures included in the MMRP is expected to avoid, minimize, rectify, reduce, or compensate potentially significant impacts to a less than significant level.

TIME OF IMPLEMENTATION

- Project Design: The mitigation measure will be incorporated into the project conditions of approval plans and specifications prior to approving the project.
- Pre-construction: The mitigation measure will be implemented prior to project construction.
- Construction: The mitigation measure will be implemented during construction.
- Post-construction: The mitigation measure will be implemented or monitored after project construction is complete.

RESPONSIBLE PERSONS AND DEPARTMENTS

The District as Lead Agency will be responsible for overall implementation of the MMRP. The District's project manager will sign off on the mitigation measures included in the MMRP. Periodically, other District staff, consultants or regulatory agencies will be involved in the implementation of specific mitigation measures. In these instances, the staff, department, or agency will be identified in the MMRP.

CERTIFICATION OF COMPLIANCE

The District will be responsible for providing signatures on the Certification of Compliance. The Certification of Compliance is a double-check to ensure that the MMRP was fully implemented.

RECORD KEEPING

The District's project manager will maintain the records of the MMRP. When the MMRP is fully implemented, the original signed copy will be maintained by the District.

¹ California Code of Regulations Title 14.

CERTIFICATION OF COMPLIANCE

Complete the Certification of Compliance after mitigation measures have all been initialed. Use this Certification of Compliance to ensure the full implementation of each mitigation measure.

Project Design

The District's project manager has reviewed the project design, the plans, and the contract special provisions to verify that designated mitigation measures have been incorporated.

Signature & title Date

Pre-construction

The District's project manager has verified that designated mitigation measures were implemented prior to construction.

Signature & title Date

Construction

The District's project manager has verified that designated mitigation measures were implemented during construction.

Signature & title Date

Post-construction

The District's project manager has verified that designated mitigation measures were implemented and/or monitored after completion of construction.

Signature & title Date

AIR QUALITY

AQ1

The following Basic Construction Emission Control Practices, as described by the Sacramento Metropolitan Air Quality Management District, shall be implemented during construction to minimize fugitive dust and emissions:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.
- A publicly visible sign shall be posted with the telephone number and person to contact at the District regarding dust complaints. This person shall respond and take corrective action within 48 hours. The LCAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation & Monitoring

Project Design: The District's project manager will verify that the mitigation measure is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Construction: The District's project manager shall ensure that Mitigation Measure AQ1 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

BIOLOGICAL RESOURCES

BIO1

To avoid impacts to migratory birds (Protected under MBTA and CDFG Code), noise-generating activities exceeding ambient conditions should be initiated outside the nesting bird season either before March 1 or after August 31. If work must be initiated during the nesting season, the following avoidance and minimization shall be implemented:

- A pre-construction nesting bird (both passerine and raptor) survey of suitable nesting habitat within the project study area and/or adjacent habitats should be performed within 10 days of groundbreaking. If no nesting birds are observed, no further action is required. A follow up survey is required if a stoppage in work occurs for longer than 10 days between March 1 and July 1; initiation of new nests is not anticipated after July 1
- If active bird nests (passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged or the nest has naturally failed or been predated, as determined by a qualified biologist. The radius of the required buffer zone can vary depending on the species and status of the nest. The dimension of any required buffer zone should be determined by a qualified biologist.

Implementation & Monitoring

Project Design: The District’s project manager will verify that the Mitigation Measure BIO1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Pre-construction: The District’s project manager shall ensure that Mitigation Measure BIO1 is implemented prior to construction.

Initials _____ Date _____

CULTURAL RESOURCES

CR1

The project plans and specifications shall provide that in the event prehistoric-era or historic-era archaeological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. Prehistoric-era archaeological site indicators could include chipped chert and obsidian tools and tool manufacture waste flakes, grinding implements such as mortars and pestles, and locally darkened soil containing the previously mentioned items as well as fire altered stone and dietary debris such as bone and shellfish fragments. Historic-era archaeological site indicators could include items of ceramic, glass and metal, and features such as structural ruins, wells and pits containing such artifacts. After cessation of excavation, the contractor shall immediately contact the District. The District shall contact a qualified professional archaeologist immediately after the find. Such archaeologist shall conduct an evaluation of significance of the site, and assess the necessity for mitigation and contact local Native American tribes, as appropriate. The contractor shall not resume construction activities until authorization to proceed is received from the District.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure CR1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials

Date

Construction: The District’s project manager shall ensure that Mitigation Measure CR1 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials

Date

CR2

If human remains are encountered during grading, excavation or trenching, all construction activity shall cease and the contractor shall immediately contact the District and the Lake County Coroner's Office. If the remains are determined by the Coroner's Office to be of Native American origin, the Native American Heritage Commission shall be contacted and the procedures outlined in CEQA §15064.5 (d) and (e) shall be implemented by the District or its designee.

Implementation & Monitoring

Project Design: The District's project manager will verify that Mitigation Measure CR2 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials

Date

Construction: The District's project manager shall ensure that Mitigation Measure CR2 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials

Date

GEOLOGY & SOILS

GS1

The District shall prepare an erosion control plan for the project. Appropriate BMPs will be implemented by the project to minimize construction-related erosion and runoff. Suggested BMPs include, but are not limited to:

- Schedule construction activities during dry weather. Keep grading operations to a minimum during the rainy season (October 15 through April 15).
- Protect and establish vegetation.
- Stabilize construction entrances and exits to prevent tracking onto roadways.
- Protect exposed slopes from erosion through preventative measures. Cover the slopes to avoid contact with storm water by hydroseeding, applying mulch or using plastic sheeting.
- Install straw wattles and silt fences on contour to prevent concentrated flow. Straw wattles should be buried 3 to 4 inches into the soil, staked every 4 feet, and limited to use on slopes that are no steeper than 3 units horizontal to 1 unit vertical. Silt fences should be trenched 6 inches by 6 inches into the soil, staked every 6 feet, and placed 2 to 5 feet from any toe of slope.
- Designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains. Maintain washout area and dispose of concrete waste on a regular basis.
- Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids. Use oil pans under stationary vehicles.
- Protect drainage inlets from receiving polluted storm water through the use of filters such as fabrics, gravel bags or straw wattles.
- Check the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.
- Inspect all BMPs before and after a storm event. Maintain BMPs on a regular basis and replace as necessary.

Implementation & Monitoring

Project Design: The District's project manager will verify that erosion control measures specified in Mitigation Measure GS1 are incorporated into the project plans and specifications prior to issuing final project approvals.

Initials

Date

Construction: The District's project manager shall ensure that erosion control measures are being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials

Date

GS2

The project plans and specifications shall provide that in the event paleontological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. After cessation of excavation, the contractor shall immediately contact the District. The District shall contact a qualified professional geologist or paleontologist immediately after the find. Such consultant shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The contractor shall not resume construction activities until authorization to proceed is received from the District.

Implementation & Monitoring

Project Design: The District’s project manager will verify Mitigation Measure GS2 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Construction: The District’s project manager shall ensure that Mitigation Measure GS2 being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

HAZARDS & HAZARDOUS MATERIALS

HM1

The contractor shall be required to follow the provisions of § 5163 through 5167 of the General Industry Safety Orders (California Code of Regulations, Title 8) to protect the project area from being contaminated by accidental release of any hazardous materials.

In general, the Contractor shall maintain awareness of potential signs of soil and groundwater contamination throughout the project limits and shall notify the District immediately upon discovery of any potential soil or groundwater contamination.

If hazardous materials are encountered during construction or occur as a result of an accidental spill, the contractor shall halt construction immediately, notify the District, and implement remediation in accordance with the project specifications and applicable requirements of the Regional Board. Disposal of all hazardous materials shall be in compliance with current California hazardous waste disposal laws.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure HM1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Construction: The District’s project manager shall ensure that that Mitigation Measure HM1 is implemented during construction, if required. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

NOISE

N1

The following measures shall be implemented at the construction site to reduce the effects of construction noise on adjacent residences:

- Noise-generating activities at the construction sites or in areas adjacent to the construction sites associated with the project in any way shall generally be restricted to the hours of 7:00 a.m. to 7:00 p.m.
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Staging of construction equipment and all stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be staged as far as practical from existing noise sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to the point where radio noise is not audible at existing residents bordering the project site.
- Notify adjacent residents to the project site of the construction schedule in writing.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure N1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Construction: The District’s project manager shall ensure that Mitigation Measure N1 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

TRANSPORTATION

T1

The contractor shall develop and submit an appropriate Traffic Control Plan (TCP) in accordance with the California Manual of Uniform Traffic Control Devices (MUTCD) for review and approval by the District and County for all project elements that impact traffic circulation. The TCP shall also include notifying adjacent businesses and residents of the construction schedule and when it will impact access. The TCP shall ensure thru traffic and temporary driveway access during periods where active construction is not taking place.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure T1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Pre-construction: The District’s project manager shall review and approve the contractor’s traffic management plan.

Initials _____ Date _____

Construction: The District’s project manager shall ensure that Mitigation Measure T1 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

T2

The contractor shall provide advanced notice regarding timing, location and the duration of construction activities to local emergency responders. The contractor shall ensure emergency responders can have access through construction areas in roadways at all times.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure T2 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Construction: The District’s project manager shall ensure that Mitigation Measure T2 is being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials _____ Date _____

TRIBAL CULTURAL RESOURCES

TCR1

The District shall enter a Cultural Resources Monitoring and Treatment Agreement with the Middletown Rancheria of Pomo Indians for all project-related ground disturbing activities. Phase I and Phase II would likely proceed under separate Agreements due to the time between phases. It is anticipated that the Agreement will consist of the following:

- In keeping with CEQA Guidelines Section 15064.5(f) and procedures required by Section 21082 of the Public Resources Code, the District shall retain a professional archaeologist who (a) meets the Secretary of the Interior’s Guidelines for an Archaeological Principal Investigator and (b) possesses the training and experience to recognize human remains in articulated, disarticulated, and cremated condition;
- The District shall maintain Native American coordination with the Middletown Rancheria of Pomo Indians, and support collaboration between the professional archaeologist and Tribal Historic Preservation Officer Michael Rivera on all data recovery efforts;
- The District shall make provisions for monitoring by the Professional Archaeologist in tandem with Middletown Rancheria of Pomo Indians’ designated representative. This monitoring team should then be tasked with close inspection of all subsurface excavations, and should be provisioned with the authority to halt all work in the vicinity of archaeological finds in order to determine the integrity and tribal and archaeological significance of the resource. If the find is determined to be an intact historical or unique archaeological resource, then the project proponent should consider project re-design to avoid or minimize impacts, and if impacts cannot be avoided, then the professional archaeologist should implement immediate mitigation data recovery measures. Work may continue in other parts of the project area concurrent with evaluation and mitigation;
- Data recovery measures may include hand-excavation of that portion of the trench where intact and significant archaeological deposits are encountered and screening of recovered soils;
- Archaeological materials from data recovery shall be analyzed and a professional report shall be prepared in accordance with consulting tribe’s recommendations and applicable CEQA provisions.

Implementation & Monitoring

Project Design: The District’s project manager will verify that Mitigation Measure TCR1 is incorporated into the project plans and specifications prior to issuing final project approvals.

Initials _____ Date _____

Pre-construction: The District’s project manager shall ensure that an Archaeological a Cultural Resources Monitoring and Treatment Agreement with the Middletown Rancheria of Pomo Indians has been established prior to construction.

Initials _____ Date _____

Construction: The District's project manager shall ensure that Mitigation Measure TCR1 and the Archaeological a Cultural Resources Monitoring and Treatment Agreement are being implemented during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials

Date